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A Racing Machine On The Wrist

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The world this week Politics



China's ruler, Xi Jinping, threw down his biggest challenge yet to the West's global leadership by holding Beijing's largest-ever military parade and a summit of 26 leaders from other countries. China showed off its new weapons, including laser gadgets, nuclear missiles and robot wolves at the parade, which was attended by Vladimir Putin, Kim Jong Un and leaders from Belarus, Iran, Pakistan and Zimbabwe. Mr Kim travelled with his teenage daughter, Kim Ju Ae, who may be the North Korean dictator's eventual successor.

A pipe dream

Mr Xi held talks with Mr Putin on the eve of the parade and said they would work to create a "more just and equitable" global system. **Russia** announced that it had reached an agreement with China to build the Power of Siberia 2 gas pipeline, which is supposed to provide China with alternative supplies to the liquefied natural gas it imports from America, Qatar and Australia. There was no detail about who would pay for the project, which is not due to be built until the 2030s. China offered no comment on the supposed deal.

Narendra Modi, **India's** prime minister, made his first trip to China in seven years and also held talks with Mr Xi. Both men spoke warmly of their relationship. Mr Modi has been trying to balance India's relations with China and America, but has been caught off guard by America's imposition of tariffs.

In **Thailand** Paetongtarn Shinawatra was dismissed as prime minister by the Constitu-

tional Court, which decided she had violated ethics rules when she held a phone call with Hun Sen, a still influential former Cambodian prime minister, to discuss a border skirmish between the two countries. The ruling Pheu Thai party wanted to name a new prime minister, but Anutin Charnvirakul, the leader of the Bhumjaithai Party, is favoured to get the job when parliament holds a vote on September 5th.

More than 1,200 people were detained in Jakarta, as the worst riots in decades beset **Indonesia**. The trouble began when students held demonstrations against the government's plans to enhance benefits for politicians amid the country's cost-of-living crisis. The protests turned violent when police ran over and killed a motorbike-taxi driver, and spread throughout Indonesia. Ten people have died overall.

Two earthquakes and associated aftershocks struck **Afghanistan**, killing at least 1,400 people. The quakes hit the provinces of Kunar and Nangarhar on the border with Pakistan the hardest. The death toll is expected to rise.

The worst floods in decades have devastated **Pakistan's** Punjab province. Hundreds of people have died since late June when the deluge started. Thousands of villages have been hit hard, with their crops destroyed and fields underwater. The resulting food shortage may fuel inflation. Meanwhile, 11 people were killed by a suicide-bomber in Quetta, the capital of Balochistan province, where militant separatists and Islamist extremists are active.

Israel pushed ahead with its offensive in **Gaza city**, launching heavy strikes and starting to send ground forces into the area. Thousands of Israeli reservists have been called up. Israel has ordered civilians to leave but many remain. Meanwhile, Israeli air strikes on

Sana'a, the Yemeni capital, killed a number of **Houthi** officials, including the Iranian-backed militia's self-declared prime minister.

America denied visas to 80 **Palestinian** officials ahead of the United Nations General Assembly in New York, at which several countries, including Britain and France, have said they will recognise Palestinian statehood. American officials were reported to have also suspended visas for most Palestinians wanting to visit the United States.

Britain, France and Germany notified the UN Security Council that **Iran** was violating its obligations under the Joint Comprehensive Plan of Action, a multinational nuclear deal. Iran has 30 days to comply. If negotiations fail, UN sanctions that had been lifted by the JCPOA, including an arms embargo, will be reimposed.



Around 1,000 people are thought to have died in a landslide in **Sudan's** central Darfur region. It is the latest humanitarian catastrophe in the country, which has been mired in civil war for more than two years. Neither side in the conflict responded to calls for a temporary ceasefire in order to send help to the area.

A 52-year-old man admitted to killing Andriy Parubiy, a former speaker of the Ukrainian parliament, in Lviv, **Ukraine's** most westerly city. Mr Parubiy was a prominent figure in the Maidan protests that led to the downfall of Viktor Yanukovich as Ukraine's pro-Russian president in 2014. Ukrainian offi-

cials suspect Russian involvement, but the assassin claims it was an act of "revenge" against the Ukrainian authorities and that he had no Russian help.

Ursula von der Leyen, the president of the European Commission, said that Europe had a "pretty precise" plan to send **peacekeeping troops** to Ukraine. That earned a rebuke from Boris Pistorius, Germany's defence minister, who said it was "fundamentally wrong" to talk publicly about such things ahead of any potential peace negotiations.

At least 16 people were killed in **Lisbon** when the Elevador da Glória, one of the three funiculars that traverse the Portuguese capital's steep hills, crashed. The 140-year-old rail car transported residents and tourists from the Baixa to Bairro Alto neighbourhoods in the heart of the city.

One rule for them...

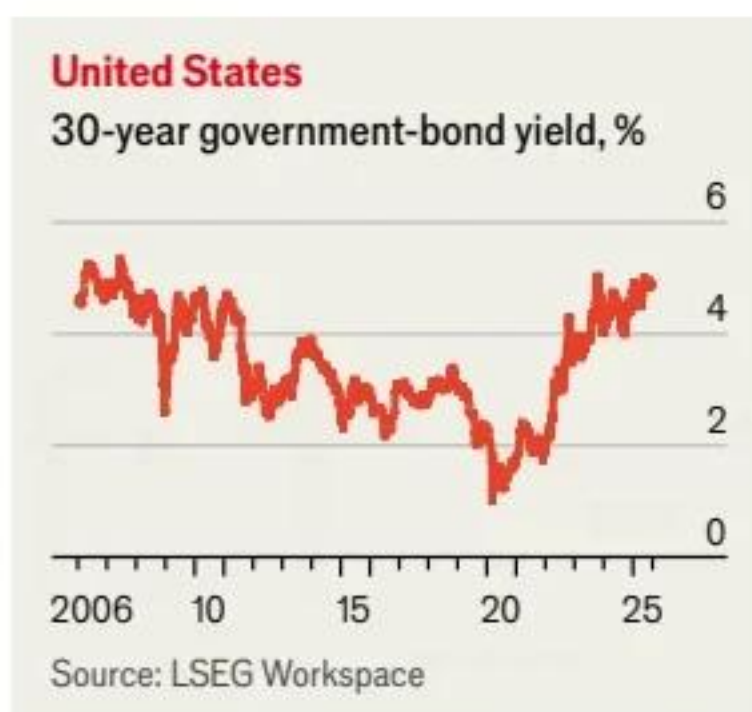
Britain's deputy prime minister came under pressure to resign after admitting that she had underpaid tax on the purchase of a second home. In recent years Angela Rayner has been notably critical of politicians she says have avoided paying tax.

The American military attacked a **Venezuelan** boat in the southern Caribbean that was allegedly transporting drugs to the United States, killing 11 people. Mr Trump said it was carrying "narcoterrorists". Questions are being asked about the legality of the operation, which happened in international waters.

Guyana held presidential and parliamentary elections in which Irfaan Ali was likely to win a second term as president. The economy grew by 44% in 2024 thanks to an energy boom. Guyana accused Venezuela of firing shots at a boat carrying election officials and ballots in the oil-rich Essequibo region, which Venezuela claims as its own.

The world this week Business

Google breathed a sigh of relief after the judge who last year ruled that the company was an illegal monopolist decided that it would not have to break itself up. Instead it must share search data with smaller companies. The Justice Department had called for much harsher remedies, such as for Google to sell its Chrome browser, in what was the biggest tech antitrust case since a trial involving Microsoft in the early 2000s. The decision may influence other efforts to rein in big tech. The judge suggested that new competition to internet search from the likes of ChatGPT had “changed the course” of the case.



Global **bond markets** came under more pressure amid a raft of investors' concerns, from persistent inflation to unsustainable government debt. The yield on 30-year American Treasuries flirted with 5%, though yields on shorter-term bonds fell. Japan's 30-year yield reached 3.29%, a record high. In Britain the yield on 30-year gilts hit its highest level since 1998, rising to 5.75%. Higher yields mean more expensive borrowing costs for governments.

The **price of gold** rose above \$3,500 a troy ounce for the first time, reaching \$3,560. Investors are piling into the conventional safe asset because the Federal Reserve is expected to cut interest rates later this month.

In a blow to Donald Trump's trade policy, an appeals court ruled that most of his **reciprocal tariffs** are illegal, finding that the International Emergency Economic Powers Act

does not grant a president “unlimited authority to impose” them (the decision does not affect Mr Trump's duties on steel and aluminium). The tariffs will remain in place until October 14th to give the Trump administration time to take the case to the Supreme Court.

American Eagle's share price soared after it confirmed that its ad campaign featuring Sydney Sweeney (and Travis Kelce) had been a roaring success. The clothing company said the jeans promoted by Ms Sweeney, an actress, had sold out within a week, despite an online backlash about the ad mentioning her “genes”. Quarterly revenue far exceeded analysts' expectations.

Claude's money

Anthropic, an artificial-intelligence startup best known for its Claude large language models, was valued at \$183bn following a round of fundraising. That is up from \$61.5bn after a previous round of capital-raising in March.

Klarna launched its initial public offering on the New York Stock Exchange, five months after postponing it amid the turmoil in markets

caused by Mr Trump's tariffs. The Swedish fintech firm could be valued at up to \$14bn, according to reports, well below the \$46bn it was thought to be worth in 2021 after a capital-raising exercise.

A decade after merging in a transaction arranged by Warren Buffett, **Kraft Heinz** announced that it would split into two separately traded companies. One of them will focus on condiments and spreads and house the Heinz, Philadelphia and Kraft Mac & Cheese brands, and the other will contain the slower-growing Oscar Mayer, Kraft Singles and Lunchables assets. Mr Buffett, who is stepping down as chief executive of Berkshire Hathaway, admitted in 2019 that he was “wrong in a couple of ways on Kraft Heinz”. Berkshire is still the company's biggest shareholder, with a 27.5% stake.

A potential corporate battle loomed into view when **Elliott Management**, an activist hedge fund, revealed that it had bought a \$4bn stake in **PepsiCo** with a view to pushing an “appropriately ambitious turnaround plan” to revive the company's stock price. Elliott has a long track record of try-

ing to shake up the companies it invests in, which most recently include BP and Southwest Airlines. PepsiCo said it welcomed “constructive input on delivering long-term shareholder value”.

In need of a Coffee-Mate

In what turned out to be a week of upheaval in the consumer food and drinks industry, **Nestlé** sacked Laurent Freixe as its chief executive for not disclosing a romantic affair with an employee. He had been in the job for just a year. Philipp Navratil takes the reins at the world's largest food company, which faces a challenge from cheaper rival brands.

And in Japan Niinami Takeshi resigned as chief executive of **Suntory**, which owns the Jim Beam and Maker's Mark whiskey brands as well as the Lucozade, Orangina and Ribena soft-drink assets, amid allegations that he possessed supplements containing possibly illegal cannabis-derived substances. Mr Niinami is one of Japan's best-known businessmen, and has been an economic adviser to several prime ministers. He says he was unaware that the supplements were illegal.



America's missing opposition

Donald Trump is unpopular. Why is it so hard to stand up to him?

IF A SINGLE political idea has tied Americans together over their first quarter of a millennium, it is that one-person rule is a mistake. Most Americans also agree that the federal government is slow and incompetent. Together, these things ought to make it impossible for one man to govern by diktat from the White House. And yet that is what this president is doing: sending in the troops, slapping on tariffs, asserting control over the central bank, taking stakes in companies, scaring citizens into submission.

The effect is overwhelming, but not popular. President Donald Trump's net approval rating is minus 14 percentage points. That is little better than Joe Biden's after his dire debate last year, and no one fretted that he was over-mighty. This is a puzzle. Most Americans disapprove of Mr Trump. Yet everywhere he seems to be getting his way. Why?

One answer is that he moves much faster than the lumbering forces that constrain him. He is like the TikTok algorithm, grabbing attention and moving on to the next thing before his opponents have worked out what just happened. The Supreme Court has yet even to consider whether deploying troops to Los Angeles in June was lawful. While the justices take their time, the president may soon use the same routine in Chicago. The court may not rule on the legality of his tariffs for months. So far the president has obeyed Supreme Court rulings, but if one legal avenue is closed he will try another and the clock resets.

Another answer is that the Republican Party always lets him have his way. It is not just that he dominates it, with an approval rating among Republicans of almost 90%. It is that the party's organising idea is that Mr Trump is always right, even when he contradicts himself. Policy debates have turned into theological disputation in which sides fight over the real meaning of his words.

Independent institutions—companies, universities or news organisations—might oppose him. But they suffer from a co-ordination problem. This is much easier to point out than to fix, because organisations that compete with each other would have to collaborate. What is bad for Harvard may not be bad for its rivals. If a single law firm can be picked off, its business may go to a competitor.

Behind all these lurks the ugly reality of Mr Trump's vindictiveness and intimidation. Previous presidents were influenced by independent-minded experts and the cabinet. The new definition of an expert in the Oval Office is someone who agrees with the boss. Bearers of bad news are sacked; awkward Republicans primaried; business leaders punished; opponents investigated. For each, the rational response is to apologise, settle and hope that someone else will do the right thing. Having seen what that entails, someone else may prefer a quiet life.

Politically, therefore, the main task of opposition falls to the Democrats. They are, to put it kindly, confused. Should they fight Mr Trump with ALL CAPS posts, as Gavin Newsom is doing? Is it all about mastering curated authenticity, like Zohran Mamdani? Do they move left? Do they occupy the centre? Is

the problem merely one of messaging that can be fixed if only activists would stop calling women "birthing people"?

The fact that Democrats can neither constrain Mr Trump nor even communicate clearly leaves their base angry (see Briefing). Mr Trump's ratings are low, but he is more popular than the Democratic Party—not because Republicans and independents disapprove of it (though they do), but because Democrats disapprove of themselves.

In the short run the self-loathing may be overdone. The midterms are a year away. In ten of the 12 elections for the House of Representatives this century, voters have turned against the party that holds the presidency. Gerrymandering, which will reduce the number of competitive seats in the House from few to almost none, means that even a president this unpopular is unlikely to suffer a landslide defeat in 2026. But a Democratic House with subpoena power would provide a crucial check on presidential corruption and incompetence.

In the long run, though, that looks like false comfort. The Democratic brand is damaged. Democrats are more trusted by the electorate on health care, the environment and democracy. But on many issues voters care about, including crime and immigration, they prefer Republicans. In the 2024 election Kamala Harris was seen as more extreme than Mr Trump. Saying the voters are wrong or sexist to think this way is not helpful.

Demography is no longer the Democrats' friend. Under Mr Trump, Republicans have made progress with non-white and young voters. The Democrats have lost the white working class. Although the most educated voters like them, only 40% of Americans aged 25 or over have a college degree. These changes mean the story Democrats have long told themselves—that they represented the real majority in America, but Republican machinations kept them out of power—is no longer true, if it ever was. Now they benefit from a lower turnout.

Ten years into the Trump era, Democrats are still underestimating him. His skill in setting traps for them is extraordinary. Take the looming vote in Congress on raising the federal debt ceiling: Democrats will have to choose between more cuts to foreign aid and shutting the government. Or take sending troops into cities, supposedly to fight crime. Democrats decry executive overreach; Mr Trump places them on the side of criminals and danger. Or take drone strikes on alleged drug-smugglers. It is hard to oppose the lack of any due process without sounding like a defender of violent gangs.

They alone can fix it

Democrats have choices about whether to walk into those traps. Lots of them think, rightly, that Mr Trump poses a danger to the country's democratic values and conclude that this alone should make him toxic to most voters. Alas, it does not. Instead, the question Democrats need to keep asking themselves is this: why do voters think they are the extremists, rather than the guy trying to establish one-man rule? ■



European economies

Fiscal fist fight

The economic consequences of Europe's hard right

INSURGENTS WHO want to smash the system often end up running it. For Europe's hard right that outcome is already a glimmer on the horizon. They are ahead in the polls, or thereabouts, in Britain, France and Germany. In Italy they are in power; in the Netherlands they briefly led a coalition; and in Poland in June their presidential candidate saw off the nominee from the centre. By 2027 the hard right could be in office in economies worth getting on for half of European GDP.

That would be a grave blow to European prosperity. The direct threat is the hard right's use of power. They sneer at technocratic management, vow to protect voters from competition and creative destruction and instead offer a seductive combination of handouts and tax cuts. Outright electoral success would mean more economic stagnation or even rolling bond-market blow-ups. The indirect threat is that in some places mainstream parties are already cowering before the populist uprising, ducking difficult reforms and aping policies from the extremes—a style of government that risks hastening the very hard-right victory they are seeking to avoid.

Europe's economy has hardly been well run in recent years. Annual GDP is rising at just 1%. Britain's 30-year-gilt yield reached 5.7% on September 2nd, its highest in over a quarter of a century. After François Bayrou, France's prime minister, announced a confidence vote in his government, to be held on September 8th, the country's 30-year-bond yield reached 4.46%, its highest since 2008. Germany, once the continent's economic motor, has barely grown since 2019.

You might think that such a dismal record only bolsters the case from the hard right that Europe needs a new approach. It does, but not the change they propose. In fact, Europe can ill-afford a period of even worse economic management.

It is worth pinning down where the dangers lie. As we report, hard-right parties have tended to moderate as they have moved closer to power (see Finance and economics section). Proposals to ditch the euro or leave the European Union are now mostly symbolic (though Alternative for Germany still flirts with Dexit). Recognising how Europe is ageing, they now argue for guest-worker schemes to supply new labour, rather than shutting borders altogether. Above all, they want to avoid the sort of economic disruption that scares voters.

However, this resistance to change makes them growth-smotherers. In Italy Giorgia Meloni has been relatively moderate—including towards Europe. But she has avoided growth-boosting reforms that would upset her voters. In America MAGA has a pro-tech, deregulatory wing that competes for the president's attention against the nostalgia of many Trump supporters. In Europe, by contrast, populism is all about preserving an imaginary past. Hard-right success would lock in Europe's least productive features: transfers to favoured groups, protectionism and hostility to competition.

An even greater problem is the hard right's fiscal profligacy. Populist parties almost all advocate a mixture of tax cuts combined with generosity for pensioners and parents of young

children—in order to boost the native birth rate. They claim that they will balance the books with huge savings from cutting spending on immigrants, scroungers, public-sector waste and Brussels. Reform UK promises giveaways worth around £200bn (\$266bn), or 5% of British GDP, according to our calculations, funded by an incredible £100bn-worth of savings, including an unspecified 5% cut across the whole of government. The party reckons it can find £42bn by cutting immigration and £10bn from better managing public-sector pensions.

Bond markets will surely puncture such illusions. Indeed, the combination of low growth and budgetary ill-discipline leads inexorably towards fiscal crisis. In the best case, this would enforce a dose of sanity. In Italy, where memories of the euro crisis are still fresh and the government depends on EU-level budget approval for access to support from the European Central Bank (ECB), Ms Meloni is running a tight fiscal ship.

But in the event of a euro-crisis, populism will redouble the peril. Today the ECB is in all but name the lender of last resort to governments. Markets have implicit faith in the vow of Mario Draghi, a former ECB president, to do “whatever it takes” to keep the euro area together, so long as governments show what a former official has termed “macroeconomic reasonability”. When the covid-19 pandemic hit, the bloc had enough unity to put together fiscal insurance in the form of a recovery fund.

Would that still be true if President Marine Le Pen or Jordan Bardella were running a National Rally (RN) government in France? In a euro-zone crisis national governments would have to work with each other and the ECB at all-night summits. The markets would harshly punish any dithering or division. For decades, the answer to every crisis has been “more Europe”. Recent crises have led to common bank supervision and the issuance of joint bonds. Such solutions would be hard to stomach for parties that promised their voters “less Europe”. You do not have to be George Soros to predict that bond investors will test the euro zone's cohesion if the RN is elected.

Between a rock and a hard-right place

All this may seem speculative. But its shadow hangs over the economy even today, because many mainstream politicians are unwilling or unable to pursue reforms for fear that they will provide ammunition to their rivals. Last year Mr Draghi unveiled a host of recommendations designed to boost Europe's economy, including integrating the continent's financial markets and many ways to cut red tape. Those proposals have gone precisely nowhere.

Europe's politicians are in a bind. Change would make them unpopular, austerity would burnish the hard right's extravagant promises, but caution, however tempting, perpetuates the rot that corrodes voters' trust in politics. *The Economist* does not underestimate the courage it will take to pursue bold change. But the miserable, defeatist alternative is to surrender the initiative to the hard right. ■



Chinese diplomacy

Xi Jinping's anti-American party

To see the cost of Donald Trump's bullying, tally the world leaders flocking to China

YOU MAY think the place where national leaders gather to talk about the state of the world is Washington, or perhaps the UN Headquarters in New York. In fact, as President Xi Jinping showed when he hosted over 20 presidents and prime ministers in China this week, a new reality is taking hold.

Mr Xi used a summit of the Shanghai Co-operation Organisation (SCO) in Tianjin to advertise China as a source of stability and prosperity. He used a military parade in Beijing, marking the 80th anniversary of the end of the second world war, to remind everyone that China has become a mighty power. The source of trouble today, he suggests, is America.

Mr Xi's claim to lead a global coalition of America-sceptic powers is not as fantastical as you might think. He received autocrats like Vladimir Putin of Russia and Kim Jong Un of North Korea, who travelled by armoured train. But he also welcomed leaders of countries that have leant towards the West, including Turkey, Egypt and India—which is furious after Donald Trump singled it out for punitive tariffs and embraced its enemy, Pakistan, after a conflict in May.

China's boast to be an anchor of stability has weight, at least in some respects. The country is already the largest goods-trading partner of most of this week's visitors, along with another 40-odd states around the world. As the Trump administration pursues a rolling campaign of economic warfare against its trading partners, China's sins of mercantilism and state capitalism look minor by comparison.

There is also a new-found unity opposing sanctions, including the extraterritorial threat America uses to sever individuals, firms and countries from the dollar-based financial system and tech platforms. More and more countries are interested in finding alternatives to the dollar. And fewer will be inter-

ested in enforcing America's sanctions on its behalf.

China's guests still have plenty to disagree about. India opposes its military build-up after skirmishes on the Himalayan border. China's neighbours must have watched its new missiles trundle through Tiananmen Square with mixed feelings. Yet among the autocrats, co-operation is deepening. Russia and North Korea are working on space and satellite systems. In return for China's support over Ukraine, Russia is thought to be offering it more of its most sensitive military technology, including submarine-propulsion and missile-defence systems.

The weakest part of Mr Xi's campaign is over international institutions and rules. He has just declared that "global governance has reached a new crossroads." State media propose that China should work with like-minded countries to uphold the UN Charter and "build a more just and equitable global governance system". Despite being cloaked in the language of multilateralism, these are code words for a China-friendly world order in which big powers dominate spheres of influence and enjoy more rights than small ones.

Few countries want Asia to be run by China.

Not everyone at Mr Xi's big bash agrees with each other on everything. The SCO is a far cry from a NATO-style alliance. Other than the unifying factor of disenchantment with Mr Trump's America, these countries often have little in common. European leaders were notably absent from the celebrations. Yet convening disparate parties with different interests is not a sign of weakness. It is what superpowers are uniquely able to do. To have China shepherd so many leaders through Tianjin and Beijing was a display of its growing power. China does not yet command a new world order. But it does show how much damage Mr Trump is doing to American interests. ■



Indonesia

On the brink

President Prabowo Subianto should heed protesters rather than crush them

THE SPARK was a young man's death. A motorbike delivery driver was passing a protest outside Indonesia's parliament on August 28th, just as a police vehicle surged forward. It crushed him. The video went viral, and mostly peaceful demonstrations turned into nationwide riots. Looters sacked the homes of five officials, including the finance minister.

The original protest was about a lavish housing allowance that Indonesian lawmakers have awarded themselves, worth nearly ten times the minimum wage in Jakarta, the capital. Now Indonesians are furious about many things, from heavy-handed policing to the grubby misrule of Prabowo Subianto, the former general who was elected president last year. The country could be on the brink of serious unrest—and Mr Pra-

bowo's governing style is largely to blame (see Asia section).

He dislikes having to deal with opposition, and so has pursued a strategy of co-opting all the other political parties by welcoming them into a ridiculously broad coalition. Fully seven of the eight parties in the lower house have joined it; Mr Prabowo is trying to persuade the last one to come on board, too. His bloated cabinet has over 100 members, up from around 50 under the previous administration.

Mr Prabowo claims that this set-up suits the country's culture. (Javanese people are polite, he insists, and dislike open disputation.) He has suggested that his mega-coalition should become permanent. That is a dismal idea. It would be an open door to corruption. To keep the factions happy, Mr Prabowo ►►

▶ has already doled out bungs, such as that housing allowance. With no opposition in parliament, disgruntled Indonesians would have no way to complain, save taking to the streets. And it would reduce pressure on Mr Prabowo to govern better.

Such pressure is urgently needed. Mr Prabowo is mismanaging the economy. Annual growth was a tolerable 5.1% in the second quarter of this year, but problems are bubbling under the bonnet. Indonesia has prematurely deindustrialised. The share of GDP from manufacturing has fallen by half in two decades. The country has failed to use its resources well. Despite huge oil and gas reserves, it has spent 20 years as a net oil importer. Its solar and wind potential has barely been exploited.

Life for many is hard. The cost of staples has jumped: a kilo of rice is 34% pricier than three years ago. Lay-offs are increasingly common; university graduates are more and more likely to be unemployed. Families struggle with debt. The share of bank loans to households that are non-performing has surged to its highest on record.

Grappling with these ills requires wise structural reforms. Instead, Mr Prabowo has ordered a 9% cut to the government's

budget to pay for a free school-lunch programme and a new sovereign-wealth fund. The fund has taken over state-owned enterprises and now receives their dividends, leading to a sharp drop in government revenues—which are already squeezed by low prices for commodities such as nickel.

The free-lunch scheme is supposed to reduce stunting, but the way to do that is to help children in the womb and before the age of two, not at school. The sovereign-wealth fund is accountable only to Mr Prabowo: a mightier tool to promote cronyism is hard to imagine.

Taking after his father-in-law?

Sensibly, the president has agreed to cancel MPs' new housing allowances. But the big risk is that he will use violent protests as an excuse to crack down even more heavily. Indonesia is nothing like the police state it was under Suharto, a dictator who was ousted by protests in 1998. But Mr Prabowo, who married Suharto's daughter, is clearly nostalgic for the old authoritarian habits. That is no way to hold together a multi-ethnic archipelago of 17,000 islands, let alone to govern it well. ■

Education and technology

Ring the changes

Schools should banish smartphones from the classroom

BACK IN THE 20th century, bored scholars had to make do with flicking rubber bands at their classmates, doodling in their textbooks or staring out of the window. Modern technology has revolutionised slacking. Most teenagers in the rich world own smartphones. Many are allowed to bring them into classrooms, where each provides a bottomless source of apps designed to be as compelling—and distracting—as possible.

A backlash is under way, as parents and teachers worry about the effects on classroom performance. On August 27th South Korea passed a ban on smartphones in classrooms. Governments from China to Finland, as well as dozens of American states, have introduced bans and restrictions of varying severity. *The Economist* is queasy about micro-managing the job of head teachers to such a degree—but schools that still welcome smartphones would be wise to think again.

This may seem fusty and technophobic. It is not. Even diehard libertarians agree that children do not always know what is in their own interests. Nor does banishing phones from maths lessons mean depriving children of experience with modern technology. They get plenty of that outside school; gaps can be patched up in dedicated lessons.

Technophiles like to point to a long history of misplaced scepticism about technology and its impact on education. A favourite example is Plato, who complained about the baleful effects of writing on the grounds that storing facts and arguments on scrolls would erode pupils' ability to remember them. But just because Plato was wrong two thousand years ago does not mean that today's worries are misguided.

Plato never put his claims to the test—whereas a growing body of research suggests that phones are indeed bad for schoolchildren. A recent study, run by an international team of

academics and conducted in India, was a randomised controlled trial, the gold standard. As we report this week (see United States section), it followed 17,000 higher-education students for three years. It concluded that requiring phones to be left outside classrooms led to a small but measurable improvement in grades. The weakest students benefited most of all.

Admittedly, the evidence is not yet overwhelming. The Indian study found only small gains. Its results contain quirks (they suggest, for instance, that bans lift performance in the first and third years of a degree but not in the second, which is odd). Although its conclusions match those of studies in England and Spain, one in Sweden found that bans had no effect.

Yet most educational interventions have only a small effect on grades. Scientists and researchers can afford to wait for the evidence to improve before issuing a final verdict, but teachers cannot. They must do the best they can for children in their classrooms with whatever evidence is available today.

And the benefits of restricting smartphone use may go beyond better exam results. One of

the more striking findings in the Indian study was that, after a while, the bans became popular with students. That fits with anecdotes from young people, which suggest the problem is in part one of collective action. If most pupils are socialising on phones, then anyone who tries to focus on lessons instead is missing out. If schools impose a blanket ban, there is nothing to miss out on.

Smartphones are far from the only problem schools face. But they are one that is easy to solve. At a time when educational progress seems to be in reverse around the world, any school that has not restricted them should consider doing so. In the long run, their pupils might even thank them for it. ■



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Letters *NATO and the Arctic, electricity prices, swimming pools, New Orleans, fantasy football*

Defending the Arctic

John Bolton suggests that the Arctic is NATO's soft underbelly (By Invitation, August 16th). He describes Canada as the "hole in the doughnut" of Arctic defence. That hole is in fact filled by the North American Aerospace Defence Command, the binational organisation between the United States and Canada that has been the first line of Arctic and North American defence since 1958. Russia gets barely a mention in Mr Bolton's analysis, but it is still the proximate, persistent threat because the Arctic Ocean is its fastest avenue of attack and Russia has enough warheads to hold North America to ransom. It is the United States' plans that are opaque. For instance, it is true that Greenland is essential to the defence of North America, but the US is highly dependent on Nuuk, Greenland's main port, for refuelling military vessels because it is dithering over the construction of a deep-water port in Alaska.

NATO has hosted its largest exercises in the Arctic since the cold war. The point that the alliance must do more is well taken, but not all NATO states can operate in the region. NATO only mentioned the Arctic in a summit communiqué mostly because Canada and the United States saw NATO as essential in Europe's Arctic, not North America's. However, the Arctic Security Forces Roundtable, which includes all seven NATO Arctic states and several other countries, needs a jolt; there should be more co-ordination of regional operations; and NATO's Integrated Air and Missile Defence planning must go beyond the committee stage.

But the United States' allies have always been there in the Arctic. When it comes to Arctic know-how and capabilities, it is as Mr Bolton states, the "wholly

inadequate" American military resources that are often the concern.

PROF. ANDREA CHARRON
Director
Centre for Defence and Security Studies
University of Manitoba
Winnipeg, Canada

America's electricity prices

You noted that the average electricity bill in America has risen by 7% so far in 2025 and blame rising demand from data centres ("Everything's computer", August 23rd). Prices have risen, but not because of artificial intelligence. At least for now. The real culprit is the escalating cost of transmission. For example, over the past ten years transmission costs in the PJM Interconnection, America's largest regional transmission organisation, have risen from 6.8% to 32.4% of the wholesale price of electricity.

The solution to higher transmission costs is competitive bidding on new transmission projects. Only about 5% of all transmission projects face

competition. The Federal Energy Regulatory Commission is at fault. It has failed to enforce Order 1,000, a regulation that requires monopoly transmission utilities to compete when building new transmission lines. Without competition, there is no reason for a monopoly to reduce costs. Hundreds of billions of dollars in higher costs have been incurred and billions more are on the way. Consumers will foot the bill for FERC's failure.

PAUL CICIO
Chair
Electricity Transmission Competition Coalition
Washington, DC

Don't be hard on the Big Easy

Does it make sense for America to keep subsidising a sinking city, you ask ("Muskrat ramble", August 23rd)? Using taxpayers' money to protect New Orleans is a question of priorities. Elon Musk's SpaceX and Tesla have received by some estimates \$38bn in public support, such as government contracts, subsidies and tax credits. That is twice as much that was spent on strengthening the levees in New Orleans after Hurricane Katrina. Greater New Orleans is home to 1.4m people and contributes over \$100bn to America's economy (yes, including from people who actually have to pay taxes). Its

culture has helped shape American culture from jazz to Cajun and Creole cuisine. I think it's safe to say the city is worth the investment. You don't have to travel to Mars to figure that out.

SCOTT TILTON
New Orleans

He shoots, he scores

"In a league of their own" (August 16th) analysed football's Fantasy Premier League by focusing on expected goals, a derivative of an individual player's performance. This neglects decades of statistical analysis covering team performance. Clearly, individuals can stand out statistically and on the pitch. However, over the course of a season it is teams that win leagues and championships.

The style of play is critical in providing those goal-scoring players with the chances to shoot. That has been the basis of much football analysis and is what makes the beautiful game such a joy to follow. My journey on the football-statistics path was influenced by the late Charles Reep, a football-data analyst, at Plymouth Argyle, my hometown club. His philosophy was clear. Implement a structure to improve your chances of scoring. After all, to win you must score more than the opposition. Sounds simple, but not so easy to achieve.

NICK LITTLE
Bloomington, Michigan

You described Brighton and Brentford as "yo-yo" clubs, meaning they are regularly relegated and promoted between leagues. Brighton has been in the Premier League for eight years. Brentford has a similar tale. Neither has yet to be relegated, or re-promoted.

Or as a fellow Seagulls supporter put it, we've yet to yo, let alone yo-yo.

HANNAH KOWSZUN
London

Taking a dip

Back Story in the August 9th issue discussed fictional swimming pools as "cauldrons of envy, danger and lust". It did not mention Jacques Deray's seminal film from 1969, "La Piscine" (The Swimming Pool). The film's entire plot revolves around the envy, danger and lust surrounding the titular pool. Omitting it is like running an article on British naval victories without Trafalgar.

JOSEPH BENJAMIN BOBER
BAER
New York

There is something deep in our psyche about pools. My mom wouldn't spend money on pool membership, the social scene of junior high

school; she would hand me my bag through the fence. An invitation to the pool next to my friend's house was a joyful time. As an adult I have a recurring dream about owning a pool. I'm still waiting for my husband to build it.

COURTNEY BROOKS
Port Orchard, Washington



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BY INVITATION

Gaurav Kapadia

A Democrat-supporting investor on how to make the party relevant again



WE'VE ALL been at a party with a well-meaning but exhausting guest; let's call him Jerry. Jerry's stories meander without a clear point. He equivocates, laments past failures, complains about the status quo and offers no solutions for the future. He talks without listening. Everyone feels for Jerry, but no one wants to be around him. The vibes give everyone the ick.

Jerry's predicament is exactly the bind Democrats find themselves in. They have lost the thread, and it is showing; of the 30 states that track voter registrations by party, the Democrats have lost ground in every single one of them over the past four years, with a negative voter-registration swing of 4.5m.

The party that once embodied American optimism now sounds perpetually pessimistic. Where Democrats once championed growth and possibility, they now focus on managing decline and redistributing scarcity. They have become the party that explains why things can't be done rather than the party that gets things done. Worse, they have become hopelessly reactive, always responding to whatever Republicans do instead of charting their own course.

To get its aura back, the Democratic Party needs to listen to a fresh crop of leaders. It isn't that hard; at cocktail parties and in politics people gravitate towards authenticity, optimism and those who listen and show respect for others. People lean away from those who make excuses, complain and patronise them. If the Democrats can harness their dynamic young talent and offer common-sense solutions that help Americans get on top of their most important issues, the vibes will be immaculate.

Conversations with Democratic senators, congressmen, governors and mayors reveal a contradiction. In private, I have found each of them authentic and filled with practical solutions. But when they move to a group setting they become cautious and insecure. This stems from fear—they are terrified of the left branding them sell-outs, the right calling them radicals and special interests vilifying them. This paralysis prevents them from conveying their authenticity and championing bold changes. They've become the party of perpetual worry rather than purposeful action.

Voters wake up worried about affording rent, frustrated by fric-

tion the government creates and anxious that their kids may not have better opportunities than they did. When Democrats respond to these concerns with vague, grandiose statements with no plan, they lose their audience.

Americans want a party that believes the pie can grow bigger, not one that just argues about how to slice it smaller. This means getting stuff done: more homes built faster, more good jobs created, more paths to prosperity opened. Take housing. Young teachers can't afford to live in the districts where they work. Nurses commute for two hours because homes near hospitals cost a fortune. Small-business owners can't find workers because their employees can't find places to live. Accepting the weaponisation of regulation by special interests in building housing and letting constituents fend for themselves has alienated voters. Democrats have let themselves get captured by every constituency except the most important one: people who need somewhere to live.

The same pattern crushes entrepreneurship. Lower-income workers and budding business-owners are being hobbled by conflicting and unreasonable rules and red tape. Hair-braiders in some states need 500 hours of training. New York City's decade-long waiting lists for food-truck permits have created an illegal secondary market where aspiring vendors pay exorbitant rates to lease permits from existing holders. Democrats claim to champion the American Dream while making it harder to fulfil. When even democratic-socialist mayoral candidates call for slashing small-business regulations, maybe it's time for the party to listen.

The required getting-things-done mindset extends beyond housing to every challenge Democrats claim to care about. Climate change? Stop blocking nuclear plants and transmission lines. Economic mobility? Cut the licensing requirements that keep people from starting businesses. Infrastructure? Build the roads and bridges instead of spending five years on environmental reviews for projects everyone agrees are needed.

Democrats need to embrace logical policies regardless of their source. If Republicans propose something that works, steal it and make it better. Immigration is a prime example. America's asylum process is indeed broken; working across the aisle to fix it should be a priority. If business leaders identify regulatory barriers to job creation, fix them. If local mayors figure out how to cut permit times in half, scale their innovations nationally.

There are reasons for optimism. In Ohio, Democrat-led Cincinnati has pushed zoning reforms and set up a trust fund to make it easier for families to find affordable homes. In Maryland, a "Feds to Eds" programme helps ease teacher shortages by fast-tracking teaching licences for laid-off federal workers. Across the country, younger Democratic leaders are showing that efficiency, pragmatism and partnership with business can produce results.

Democrats have a choice: embrace the vanguard of leaders who make things work, or remain the party that excuses away why they don't. Americans are exhausted by broken systems and frustrated by leaders who seem to ignore or misunderstand their complaints. They want less process and more progress.

The party that works out how to be both principled and practical, both compassionate and competent, will own the next generation of American politics. The party that doesn't will find itself exactly where Jerry always ends up: talking to an empty room while everyone else has moved on to better conversations. ■

Gaurav Kapadia is a New York-based investor and entrepreneur.

Briefing The Democrats



How Democrats might win back power

CHIMNEY ROCK, IOWA CITY AND NEW YORK

The party is trying to talk less about pronouns, more about prices

IF YOU WANT to hear someone bad-mouth America's Democratic Party, ask a Democrat. "They're lost." "They need to get their act together." They're "dinosaurs". These were some of the views *The Economist* heard from Democratic voters in Iowa, New York and North Carolina in August. Practically none gave their party a passing grade. Democratic bigwigs are equally vexed. Elizabeth Wilkins, the boss of Roosevelt Forward, an advocacy outfit, describes the party's mood as: "Oh, my God. We lost to this guy again. [Voters] knew who he was, and they voted for him anyway. We must be doing something really, really, really wrong."

The only notable elections this year are for governor in New Jersey and Virginia and for mayor in New York. The Democrats' next chance to win back some power nationally will come at the mid-term elections in November 2026. If the party retakes the House of Representatives or (a longer shot) the Senate, it will be in a bet-

ter position to curb Donald Trump's excesses. It will have a say on the federal budget and power to investigate wrongdoing in high places. But given the party's disarray, will it make much headway?

Voters usually treat mid-term elections as a referendum on the president, so the Democrats ought to be strolling to victory. Mr Trump is unpopular, with a net approval rating of minus 14, according to *The Economist's* tracker. However, the Democratic Party appears to be even less popular, with a 28-point gap between the share of registered voters who view it favourably and the share who view it unfavourably. This is 12 points worse than the Republican Party's net favourability. Yet that may be a poor guide to voting intentions. Many Democrats view their own party with disfavour for letting Mr Trump win, notes Larry Sabato of the University of Virginia. They will probably still vote for it.

The Democrats are painfully divided over how to fight back. Should the party

lurch to the left to boost turnout among true believers, or cleave to the centre? Should it focus on denouncing Mr Trump, or promote a platform of its own? Should it fight back hard and dirty, or follow Michelle Obama's advice from 2016: "When they go low, we go high"?

Souljah-searching

When the party was locked out of the White House for 12 years in the 1980s and early 90s, Bill Clinton revived its brand by forcefully occupying the centre. He embraced fiscal sobriety, market-friendly economics and a tough approach to crime. He also distanced himself from activists who repelled middle America. In 1992 Sister Souljah, a rapper, said of the LA riots, "If black people kill black people every day, why not have a week and kill white people?" Mr Clinton denounced her furiously and won the presidency soon after.

To win over swing voters today, many Democrats think their party needs a "Sis- ►►

► ter Souljah moment". Eric, a medical student in Iowa City, hates the way Republicans play down climate change and thinks Mr Trump's military parade in Washington was "a throwback to what Hitler would do". He examined the spreadsheets of Mr Trump's "big, beautiful" budget bill, and was dismayed by how much it cut Medicaid (health care for the hard-up).

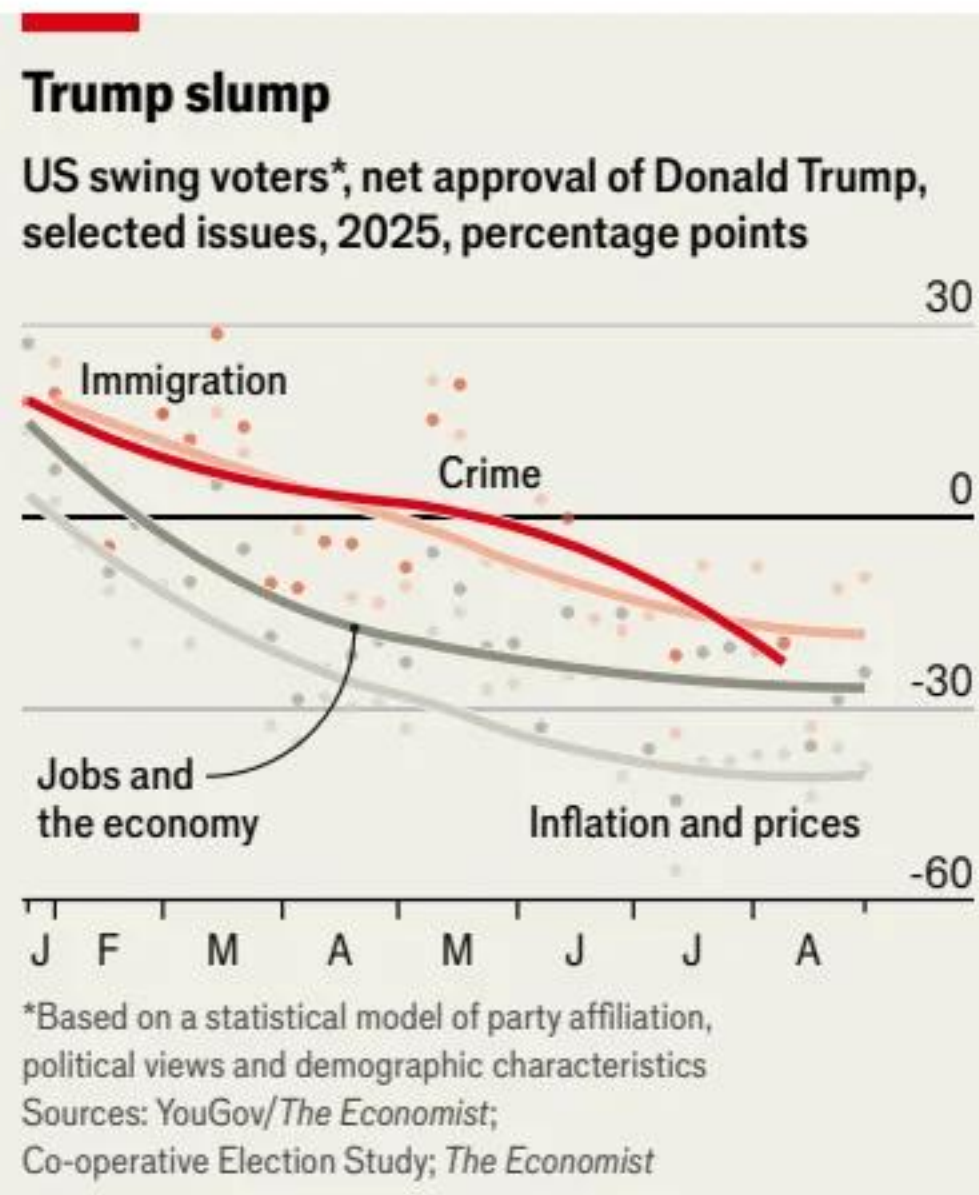
Yet he is a Republican, he says, because left-wing views are constantly rammed down his throat on campus. Like most Americans, he favours secure borders and colour-blind college admissions—views deemed racist by cancel-culture commissars. He didn't want his real name used, for fear of ostracism, amplified by social media—a threat less grave than authoritarianism in Washington, perhaps, but far more immediate. A nearby mural declaims, "WEAPONISE YOUR PRIVILEGE TO SAVE BLACK BODIES". So "if I don't do something, black people are gonna die?" sighs Eric. "That's a bit extreme."

Most Democratic officeholders do not govern on "wildly out-of-touch social positions", argues Third Way, a centrist group. But "Democrats and their allies use an awful lot of words and phrases no ordinary person would ever dream of saying. [The intent]...is to include [but] the effect...is to sound like the...obfuscatory enforcers of wokeness." Pressure groups give candidates questionnaires and want them to tick every box. Kamala Harris gave Donald Trump his best attack line in 2024 by telling one such group that she favoured paying for "gender-affirming" surgery for prisoners. Hence "Kamala is for they/them. President Trump is for you."

Several senior Democrats are now snubbing the activists. Rahm Emanuel, a former mayor of Chicago and White House chief of staff, has said that a man cannot become a woman. Gavin Newsom, the governor of California and a probable presidential candidate in 2028, says it is "deeply unfair" for biological males to compete in women's sports. Such views are popular everywhere except in progressive circles. A party grandee predicts that Democrats will keep insisting that "you shouldn't bully trans people for who they are", but drop policies such as paying for trans medicine for children.

In places that Democrats hope to flip, candidates are downplaying culture and emphasising the cost of living. The candidates for governor in New Jersey and Virginia, a former Navy pilot and an ex-CIA officer, both fit this description. So do several contenders for Congress next year.

People "are seeing the price of utilities, groceries and rent go up and up, and there's too much month at the end of the money," says Roy Cooper, a former governor of North Carolina, who is hoping to bag a crucial open Senate seat next year.



Mr Cooper is no one's idea of an extremist. As governor, he worked with Republicans to balance the state's budget and expand public health insurance. In person, he is soft-spoken and warm. Visiting Chimney Rock, a village that was flooded last year, he praises locals' "courage, resilience and hard work" rebuilding. One points to floorboards that were nailed in place by another politician; Mr Cooper jokes that he'd better be "careful" stepping on them.

Behind the aw-shucks charm is a ruthless focus on issues that should help Democrats with swing voters. *Economist/YouGov* polls show that the 20% of voters who are at the ideological centre supported Mr Trump over Ms Harris by 52% to 44% in 2024. Yet now they give him a net approval rating of minus 27 points. At the start of his term they liked his handling of crime, immigration, the economy and inflation. Now they disapprove on all four counts, with a whopping minus 40 for prices and inflation, the problem they care about most (see chart).

Mr Trump's "erratic tariffs" will make things worse, warns Mr Cooper: "You know it's a tax on everyday families." Adding to the strain, Mr Trump is slashing



➔ **Read more**

Wes Moore, governor of Maryland, and other guest contributors write about how the Democrats can revive their fortunes at [economist.com/byinvitation](https://www.economist.com/byinvitation)

health care. Medicaid cuts will not be felt until after the mid-terms, but subsidies for Obamacare are due to end in December. Unless they are extended, 20m Americans will see their out-of-pocket costs soar by 75%, by one estimate. "That's going to be a shock," says Mr Cooper.

Though Democrats all want to ease economic pain, they differ as to how. The left favours old-fashioned public spending, paid for by squeezing the rich. Moderates are warming to "abundance", a reference to a fashionable book by Ezra Klein and Derek Thompson, two journalists who call for loosening regulations to make it easier to build new homes and energy projects.

Among the party's footsoldiers, the left stirs more passion. Bernie Sanders, an 83-year-old senator from Vermont, is crisscrossing the country on a "Fighting Oligarchy" tour. On a recent evening in Davenport, Iowa, he raised thunderous applause for promises of free health care, free college tuition and larger pensions, and thunderous boos at every mention of plutocrats. (Humdingers like "government of the billionaire class, by the billionaire class, for the billionaire class" gave him ample time to catch his breath.) The crowd loved it. But his promises are implausible. By one estimate, his spending plans in 2020, when he last ran for president, would have doubled federal spending.

Wham, bam, Mamdani

In the same vein Zohran Mamdani, a 33-year-old "Democratic Socialist", has made himself front-runner in New York's mayoral race with a mix of social-media razzle-dazzle and lavish promises: free buses, free child care and cheap government-run grocery stores. He would freeze the rent of New York's rent-stabilised apartments (nearly half of the total) and crack down on bad landlords, even seizing the property of the worst. He vows to pay for it all with extra taxes on the rich. Businesses fear him. The party is wary of him. Mr Trump calls him a "100% communist lunatic".

When Democrats are in power, moderates tend to have more influence over economic policy than the far left. But given the foul mood of voters, some populist policies would be likely under a future Democratic administration. Raising taxes on companies and high earners is popular; so is the idea of forcing drug firms to reduce prices. Government-run grocery stores get a thumbs-down in polls, but two-thirds of Americans like the sound of rent controls, despite decades of evidence that they reduce the supply of new housing.

The abundance agenda is more likely to deliver results. Draconian land-use rules make housing unaffordable in the cities where the best jobs are. Easing them could raise output per worker by 8%, by one estimate. Demand for energy is soaring owing

▶ to AI, yet Mr Trump is throttling the expansion of the cheapest sort, renewables. Abundance Democrats vow to dynamite such roadblocks to prosperity. Mr Cooper talks of streamlining permitting so “we can make it easier to build affordable housing and still protect our air and water”. Mr Newsom has signed a reform exempting urban homebuilding from California’s any-one-can-sue-to-block-anything environmental law. Josh Shapiro, the governor of Pennsylvania, cut through red tape to repair a collapsed highway in days. Elissa Slotkin, a Michigan senator, offers an “all-of-the-above” energy plan, including renewables, fossil fuels and “new stuff that’s still in development”.

The left is not wholly allergic to supply-side reforms. It is happy, for instance, to smash corporate monopolies to help consumers. Even Mr Mamdani sometimes complains about red tape. In a slick video called “halalflation”, he noted that a crazy permit system for food trucks in New York raises the price of kebabs.

It is unclear which of Mr Trump’s tariffs Democrats would keep, were they in power, though many say they would be tougher on China and less cavalier about alienating allies. All agree that having one fickle man setting policy is a bad idea. “Businesses value predictability,” notes Mr Cooper. He adds that Republicans have “completely” surrendered Congress’s proper constitutional role setting tariffs.

On AI, the Democrats sound muddled. Many are scared that the technology will destroy jobs. The left argues that if AI raises productivity, people should get a shorter working week and perhaps a universal basic income. Moderates such as Gina Raimondo, a former commerce secretary, want to prepare workers for the coming disruption while welcoming foreign AI engineers. Zoe Lofgren, a representative

from California, says politicians should be aware of writing laws that may quickly end up out of date.

On immigration, Mr Trump’s approval rating has plunged among swing voters since he took office, from plus 18 to minus 18. Many are glad that the border is secure, but appalled by enforcement agents shoving grandmas into vans. Democrats see an opening. On August 25th 115 House Democrats unveiled a plan to enhance border controls while restoring due process.

On law and order, the Democrats have a problem. Mr Trump is trying to goad them into siding with criminals. When he sent the national guard to Washington, DC, to crack down on crime, progressives howled that a would-be despot was preparing to use soldiers against his political opponents. So far, however, the troops in DC have done little besides pose for pictures. Stephen Miller, Mr Trump’s deputy chief of staff, says Democratic objections show that the party is “devoted exclusively to the defence of hardened criminals, gangbangers, and illegal alien killers and terrorists”.

That is absurd. But Democrats are less gung-ho about policing than swing voters are, and some on the left are well outside the mainstream. Mr Mamdani has disavowed past calls to “defund the police”, but the Democratic Socialists of America, a group to which he belongs, still wants to abolish “the carceral state”. Volunteers for Mr Mamdani are given a script for voters who ask about crime. “Listen and affirm their feelings,” it says, then talk up his plan for a “Department of Community Safety”.

Moderate Democrats want to make it clear that they oppose lawlessness on the street as well as in the Oval Office. Party wonks promote anti-crime policies such as hot-spot policing, bullet-case tracing and, of course, gun control.

Many big cities have been Democrat-

run for decades. This makes it easy for Republicans to blame them for every urban problem, from homelessness to disorder. The Black Lives Matter riots of 2020 did not help: Republicans are still talking about the no-police zone in Seattle, which was welcomed by the Democratic mayor but swiftly turned anarchic. When it comes to governance, however, MAGA has vulnerabilities of its own. Democrats slam Mr Trump’s family for its grotesque conflicts of interest, and point to an erosion of norms at every level of government.

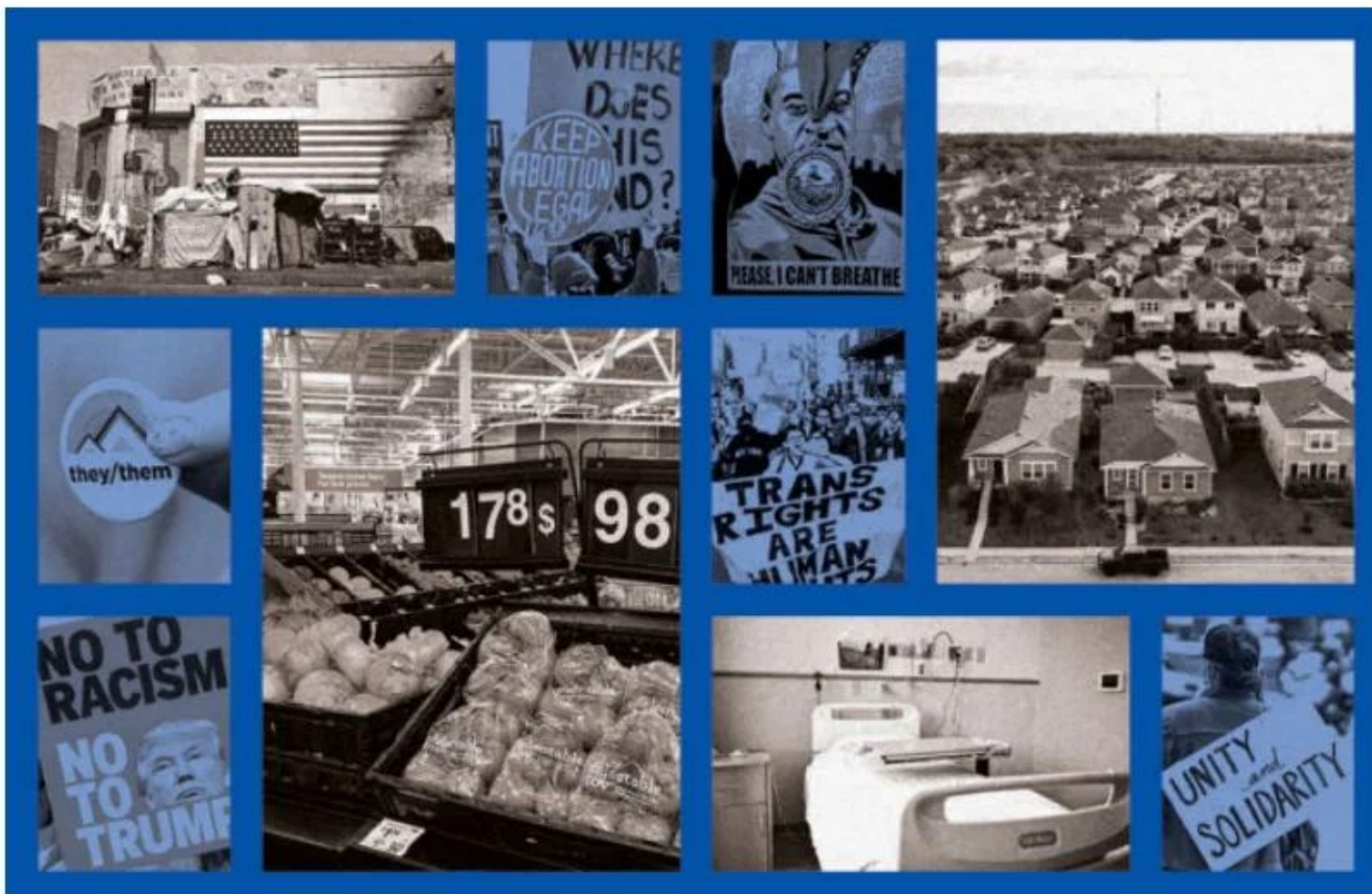
Sand-blasting

In Iowa, for example, the Democratic state auditor, Rob Sand, accused the Republican governor of misappropriating covid recovery funds. She later signed a bill making it almost impossible for him to investigate her administration without her say-so. Mr Sand called this “the greatest pro-corruption bill in state history”. Now he is running for governor; and as a Bible-quoting hunter, he could win a state that Mr Trump carried by 13 points in 2024.

The force that most animates all Democrats is fear and loathing of Mr Trump. “If it walks like a duck and quacks like a duck, it’s probably a Nazi,” says Mickey Goodmark, a theatrical costume manager in New York. But allusions to the Third Reich persuade few swing voters. Democrats “have to have a way of talking about it that relates to how everyday life is different”, said Pete Buttigieg, another likely presidential candidate, on National Public Radio. “It’s not just autocracy is bad ...it’s that when you have an autocrat in power, he can get away with appointing incompetent people. ...We have the person in charge of American public health who is a quack who doesn’t believe in medicine, and now measles is on the rise in America.”

Passionate young left-wingers think the best people to take on Mr Trump are passionate young left-wingers, such as Mr Mamdani. But moderates fight, too. Mr Newsom has started trolling Mr Trump on X, juxtaposing North Korean propaganda posters with images of the president. He has also scrapped the California Democrats’ high-minded commitment to drawing electoral boundaries in a non-partisan way; he wants to gerrymander as hard as Republicans do in Texas. Patrick Ruffini, an analyst, says such tactics are here to stay, and will make it hard for either party to win a large majority in the House.

In 2016 and 2024 the Democrats had one job—to offer a persuasive alternative to Donald Trump—and they flubbed it. Next year they have a chance to limit the damage, and act as a check on a president without self-restraint. Betting markets give them a 68% chance of winning the House. Yet given the party’s omnishambles, that is less reassuring than it should be. ■



United States



Trump v academia

Struggle sessions

ATLANTA AND LOS ANGELES

The administration is extending its pressure campaign to public universities

ON THE EVE of a new academic year, the campus of the University of California, Los Angeles (UCLA) is tranquil. A few students wander around wearing backpacks. Banners declaring UCLA the country's "#1 public university" are inescapable (a claim that rankles with the University of California, Berkeley, a state rival). A year ago, tents housing students who were protesting the war in Gaza filled a lawn where a young woman now sunbathes.

But the calm masks deep anxieties. In July the Department of Justice (DoJ) alleged that UCLA was "deliberately indifferent" to the antisemitic harassment of Jewish and Israeli students perpetrated by protesters in the tent encampment. In response, the Trump administration froze \$584m in research grants from the National Science Foundation (NSF) and the National Institutes of Health (NIH), hindering studies on everything from Alzheimer's to opioids. To release the funding,

President Donald Trump is asking for \$1bn, or roughly 9% of UCLA's annual budget, a ban on overnight protests and a host of other changes. The DoJ gave the university until September 2nd to negotiate a deal or face a lawsuit. "It's extortion, it's the only way to look at it," says Donald Heller, a former provost of the University of San Francisco.

In some respects UCLA's predicament is an extension of the administration's attacks on elite private institutions. As was

true of Mr Trump's fight with the Ivy League, California is one of the president's favourite foils. Attacking the Golden State is, at this point, a treasured pastime for this White House. But this also marks a new stage in Mr Trump's shakedown of universities. If the administration succeeds in damaging the public universities that annoy him (ie, the ones in Democrat-run states) the strain will have a broader impact than his attack on wealthy, private schools.

The Ivies educate less than 2% of America's college students. The vast majority—just shy of three-quarters of students—attend public universities like UCLA that are more extensively funded by taxpayers. Some of these schools do the most to foster upward mobility, yet they rarely make the news. An analysis by the Carnegie Foundation, a non-profit, and the American Council on Education (ACE), a trade association, identified 478 "opportunity colleges", places where a smart local student has a shot at admission and where earnings after graduation are high. None of the Ivies made the list. Elite private universities excel at research but public ones produce lots of it too. Of the ten universities that receive the most grant funding from the NSF, seven are public and three are in the University of California (UC) system. UCLA ranks 7th, Harvard 15th and Columbia 19th (see chart on next page). ▶▶

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▶ Recognising the high stakes, the University of California's Board of Regents, which oversees the entire ten-campus system, has been tight-lipped about their negotiations with the administration. Gavin Newsom, the state's Democratic governor, who sits on the board, has characteristically made his opinion known, however. "We'll sue," he has said. Whether UCLA pursues a lengthy legal battle or settles for a large sum, it will be hard-pressed for funding. (A federal judge has already told the administration to restore some of the frozen grants.) Faculty and officials are hiking up to Sacramento, the state capital, to ask whether the legislature could help. New polling from Berkeley's Institute of Governmental Studies suggests that 58% of Californians would support increasing state funding for the UC system.

Before the DOJ released the results of its antisemitism investigation UCLA had already banned encampments and eliminated the use of "diversity statements" in hiring. Hours before the feds dropped the hammer the university had settled a lawsuit with Jewish students. Anna Markowitz, president of the UCLA Faculty Association, calls this "anticipatory obedience". "The UC didn't want to poke the bear," she says. But "the bear is coming." Administrators at America's other public universities are also self-censoring. They are no doubt watching what happens in California while biting their fingernails.

Many public universities are hoping to be more successful than UCLA at staying under the radar. In June, after grantmaking slowed at the University of Washington, one of America's biggest research machines, the outgoing university president told local radio in Seattle that she wants to "be pragmatic" and not "make big statements to make big statements".

Public universities in Republican states

have been reluctant to sign on to lawsuits against the federal government. That reflects local conservatism and also the fact that Mr Trump does not seem inclined to harass schools in places where he has had political success. At Miami Dade College in Florida, the country's biggest community college, there has been no disruption. Pell Grants from the federal government cover tuition for 60% of students but Madeline Pumariega, the president, is not worried that the Trump administration will go after them. "Our students aren't lying on the green grass looking up at the sky finding themselves, they're working towards getting jobs," she says. She reckons Mr Trump supports that.

When the government withheld NIH research grants from the University of Alabama at Birmingham, Katie Britt, a senator for Alabama, wrote to the White House to argue that it was in the interest of the Make America Healthy Again movement to fund research on cancer and chronic diseases. She also spoke with Mr Trump. Soon \$15bn in funds, for Alabama and other universities, were unfrozen. Her efforts "chastened the administration", says one higher-education policy wonk.

Ohio State University, the alma mater of J.D. Vance, the vice-president, has lost some federal funds but not enough to force them to cut PhD programmes or sack post-docs. Ted Carter, its president, attributes their relative immunity to the fact that the school "stuck to [its] mission" and stayed out of politics. Pro-Palestinian encampments on its campus were swiftly shut down by police and university leaders. When Mr Carter visited the Oval Office with his championship-winning football team earlier this year he told Mr Trump that "Ohio State is the institution that is going to get it right." Mr Trump responded: "I know you will." ■



Tariffs in court

Whose emergency?

NEW YORK

The president's power over trade faces a Supreme Court test

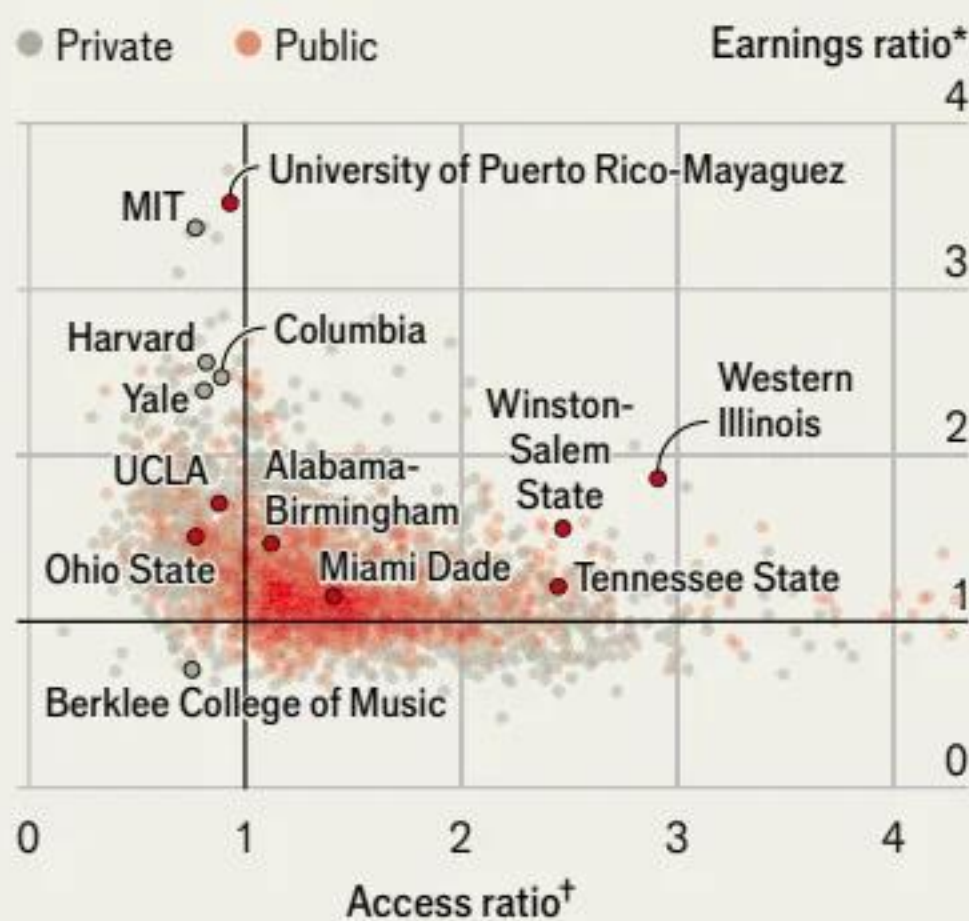
DONALD TRUMP'S tariffs have been dealt a legal setback, but nine months from now, he may look back at the ruling by a federal appeals court as little more than a speed bump. The court ruled on August 29th that Mr Trump cannot single-handedly rejig America's tariff schedules. On September 3rd Mr Trump asked the justices to quickly hear and reverse that ruling. The tariffs will remain in effect while the justices mull that request.

The case concerns the scope of Mr Trump's authorities under the International Emergency Economic Powers Act (IEEPA), a statute enacted in 1977. It allows presidents to "regulate...importation" to "deal with any unusual and extraordinary threat...to the national security, foreign policy or economy of the United States". Mr Trump cited two emergencies to justify the sweeping duties he announced in February and in April, and has adjusted many times since: the fentanyl crisis and "large and persistent...trade deficits".

Unlike other statutes that explicitly delegate Congress's trade authority to presidents, the IEEPA does not mention "duties" or "levies" or "tariffs". Mr Trump exceeded his authority by relying on the statute to manage trade, the appellate court held by a 7-4 margin. Four of the judges wrote separately to say that the IEEPA bars all presidential tariff-tweaking. But the majority took a middle path, contending that while some tariffs derived from the IEEPA might

Public powerhouses

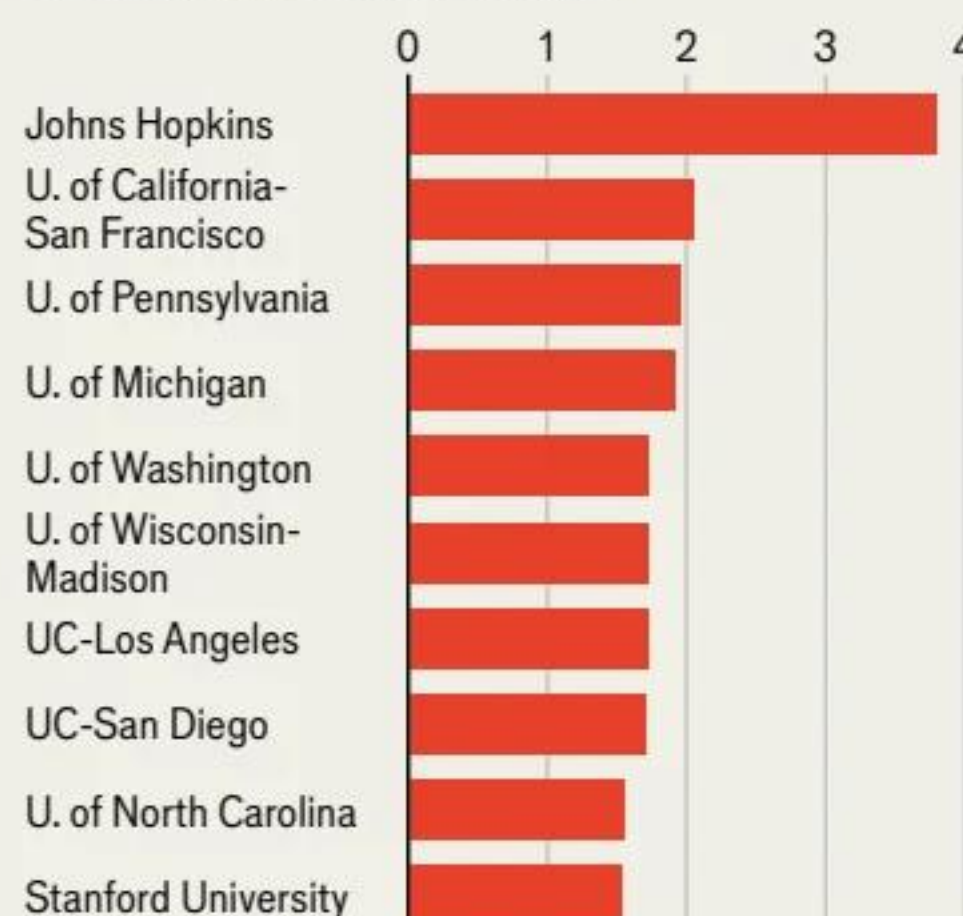
US universities, 2025



Sources: National Science Foundation; American Council on Education

*Earnings eight years after graduation, compared with area average for high-school graduate †Enrolment of Pell-grant recipients and minority students, compared with area average. Some outliers not shown

Top ten US universities, National Science Foundation funding, 2023, \$bn



► be fine, Mr Trump's are over the line.

A similar case already at the Supreme Court's doorstep may give the justices an opportunity to reckon with the most restrictive interpretation of the IEEPA. In May a family company that claims the tariffs pose an "existential threat" to its educational-toys business persuaded a federal court in the District of Columbia that the statute hands no tariff authority whatsoever to presidents. The plaintiffs want to leapfrog the federal appeals court in Washington, DC, to bring a "prompt and final resolution of the exceptionally pressing" question of the tariffs' legality.

In recent years the Supreme Court has relied on two principles that could be seen to favour Mr Trump's challengers. The "major-questions doctrine" requires Congress to authorise executive actions with vast economic and political significance. And according to the "non-delegation doctrine", even if Congress does speak clearly, it cannot bend the constitution by handing over its power to set taxes.

If the court sides with Mr Trump, it will have to explain why it rejected Joe Biden's plan to forgive student loans—on the grounds that Congress had not spoken clearly enough—yet sees no problem letting a president mount the most sweeping rewrite of America's tariff policy in a century without explicit legislative sanction.

Mr Trump predicts the justices (one third of whom he appointed) will "help" him save the tariffs. He could be right. Justice Brett Kavanaugh wrote in a recent case that the major-questions and non-delegation doctrines do not apply "in the national security or foreign policy contexts". He and the other five conservative justices may balk at the squishiness of the appellate court's recent interpretation of IEEPA and reject the DC district court's even narrower reading of presidential authority.

The high court's conservative bloc is likely to echo the "considerable deference" to Mr Trump's judgments endorsed by dissenting judges on the appellate court. It has often indulged even novel claims of presidential power. In 2018 the court upheld Mr Trump's ban on travel from predominantly Muslim countries and last year it gave presidents wide protection from criminal prosecution. Tariffs dressed up as emergency foreign-policy measures could receive similar solicitude.

But even if Mr Trump loses this one, he has other legal tools. The Trade Expansion Act of 1962 and the Trade Act of 1974 allow presidential action on imports, although with limits. Oral argument at the Supreme Court could take place as early as November with a decision weeks or months later. But even with an expedited schedule, America's experiment in tariffs-by-emergency-decree will have reshaped global commerce by the time the justices rule. ■



Schools and phones

Attention deficits

NEW YORK

A randomised control study in India supports banning phones in classrooms

BANNING PHONES in schools has emerged as a rare bipartisan policy across America. As the school year begins, millions of students in 17 states, from New York to Kentucky, will be newly prohibited from taking phones into the classroom, bringing the total to 35 states with such laws or rules. America is no outlier here. Around the world bans on phones are being enacted or proposed in at least 40% of national education systems, with the aim of helping students focus. But whereas political momentum for keeping classrooms phone-free is growing, researchers have noted that scientific evidence for the benefits is thin: a few small-scale studies with differing designs yielded mixed results.

A new working paper by Alp Sungu, a professor at the University of Pennsylvania's Wharton School, with collaborators, offers clear evidence from the first large-scale randomised control (RCT) study. The study is groundbreaking, says Anne Maheux, an expert in adolescent development at University of North Carolina at Chapel Hill, and it delivers "strong causal evidence" that banning phones improves classroom results.

The study was ambitious. In ten higher-education institutions in India, 16,955 pupils taking 2,000 courses were randomly assigned to classrooms where they did or did not have to surrender their mobile phones. The phone-free students performed better academically. The increase

was greatest among first-year students who were low performers and studying subjects outside of science and maths. The average improvement was on the order of 0.086 standard deviations in grade point average. This is small, but the effects of most educational interventions are small. For comparison, it is similar to "swapping a mediocre teacher with a very good one" for a term, says Dr Sungu.

That could make the difference between passing and failing, and potentially reduce dropout rates and increase graduation rates over time, says Louis-Philippe Beland, an economist at Carleton University in Ontario, who ran an influential study of phone bans in Britain. "For low-achieving students, even modest differences can really matter," he says. For sterner students having a phone made no difference, or was mildly positive (see chart).

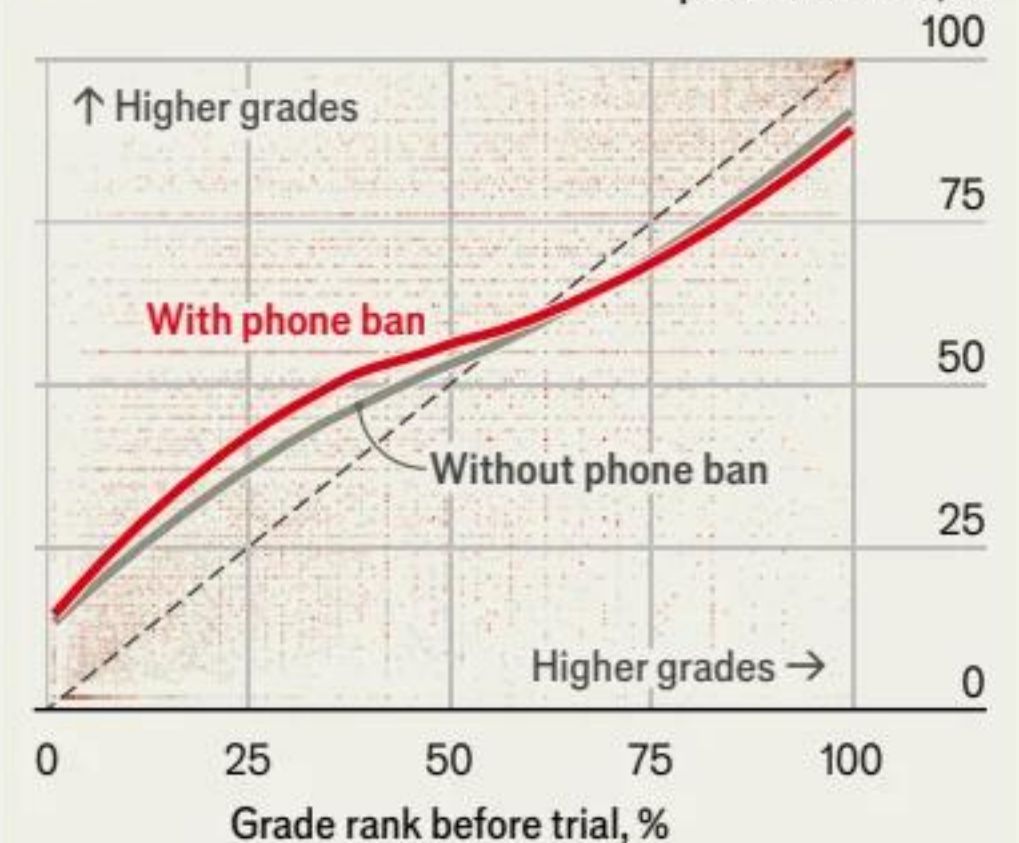
The new study will not end the argument over phones in schools. That debate is taking place across wildly diverse socioeconomic settings, from rich countries in northern Europe to phone-saturated cities in the developing world, where opportunities for learning, peer pressure and the lure of online distraction may differ greatly. The new study was confined to India, which may have cultural differences that make the results exceptional. Findings within one age group do not necessarily apply to others. And the benefits of classroom bans were especially visible in non-STEM classes, for reasons the authors can only speculate about.

However, this randomised control study—the gold-standard in social science—lines up with some earlier work that identified similar effects in other age groups and contexts. Small-scale studies of pupils in their early teens in Norway and of secondary (high) schoolers in Britain also found that phone bans led to academic gains for economically disadvantaged ►►

Candy crushing it

India, university students*, 2024

Grade rank after phone ban trial, %



*16,955 students across ten higher-education institutions
Source: "Removing phones from classrooms improves academic performance", by A. Sungu et al., July 25th 2025

▶ and low-achieving pupils.

The study by Dr Sungu and his collaborators also found that bans created an environment more conducive to learning. Random classroom spot-checks found less student chatter and disruptive behaviour. In classrooms where phones were absent even teachers used their own phones less—how did they find the time in the first place?—and they also became more engaged with pupils. And removing phones reduces the scope for cheating. In a 2017 survey of high schoolers in America, Canada, Australia and the UK, nearly a third of American pupils reported using phones or other devices to cheat.

Bans are easy to implement, requiring no training and little or no investment. Perhaps more important, many pupils can see their merit. Once they experienced a ban for a term, students in the Indian study

were 20% more likely to support prohibitions, with the largest increases in approval for the most restrictive policy option, phone-free schools.

Even if banning phones becomes a near universal, evidence-based policy, though, there are still tablets and laptops—intended as aids to classroom instruction, but offering many of the same temptations to distraction. Some studies of computer use in college classrooms in America found grades and exam scores declined. Such alternative portals to so-called “cyberslacking” may help explain why a quasi-experimental study of a phone ban in Swedish secondary schools found no effect. Digital technology is highly integrated into teaching in Swedish education, the authors say, so implementing a ban in such a setting “may well be ineffectual”. American schools should take notice. ■

Executing authority

Drone pilots of the Caribbean

A new and legally dubious claim of presidential power

“THERE’S MORE where that came from,” said President Donald Trump, celebrating a military strike on September 2nd on a boat that he said was full of drugs and “narco-terrorists” from Tren de Aragua, a Venezuelan gang. He later added on Truth Social: “Please let this serve as notice to anybody even thinking about bringing drugs into the United States of America. BEWARE!”

This was smart politics. Drug gangs are extremely unpopular, not least because 80,000 Americans died of overdoses last year. If blowing suspected drug boats to pieces were to reduce that awful toll, Mr Trump could reasonably claim to be protecting American lives. Official video footage of the explosion dominated television news (see picture).

Previous presidents have used drones to assassinate suspected terrorists in places where they might prove impossible to arrest. Barack Obama ordered 563 “targeted killings” of alleged terrorists in turbulent countries such as Pakistan, Somalia and Yemen, as a consequence of which between 64 and 801 civilians died. Though controversial, these had a credible legal justification, since Congress had authorised the use of military force against al-Qaeda after it deliberately crashed planes into two New York skyscrapers and the Pentagon in 2001, killing 3,000 people.

Mr Trump is stretching this argument much further. He has designated drug car-

tels as “terrorists”. This is dubious: unlike al-Qaeda or Islamic State, the cartels kill people in pursuit of a commercial goal (selling drugs), not a political one. Mr Trump also claims that Tren de Aragua is conducting an “invasion” of the United States at the behest of the Venezuelan government. There is little evidence to support this claim, and an appeals court rejected it on September 2nd.

Polls suggest that American voters are

happy to label drug gangs “terrorists”. But Mr Trump’s Humpty-Dumpty approach to language has real-world consequences. Alleged “invaders” rounded up in America have been sent to a hellish prison in El Salvador where they may never come to trial. The 11 “terrorists” on the alleged drug boat this week were in effect subject to extrajudicial execution.

There is precedent for using the American armed forces to support law enforcement. But the conventional approach to intelligence that a boat in international waters is heading to America full of drugs is to stop and search it, perhaps with the navy supporting the coast guard or Drug Enforcement Administration. If drugs are found, the crew can be arrested, tried and jailed. If the intelligence proves false, no one has been killed.

Mr Trump hopes that his show of force will deter smugglers. But if the supply of drugs is squeezed, the price tends to rise, calling forth new supply. Synthetic drugs such as fentanyl can also be made in America. So missiles may not reduce overdose deaths (which fell sharply last year, thanks to softer interventions).

Calling cartels “terrorists” will “create the cognitive space for the further militarisation of the drug war”, argues Brandon Buck of the Cato Institute, a think-tank. Much will depend on whether Mr Trump contents himself with blasting boats in international waters, or actually sends troops to attack gangs on Latin American soil. Doing so in Mexico against the will of Mexico’s government would cause a dire rift with a previously friendly country. Venezuela’s despot, Nicolás Maduro, was exaggerating when he described Mr Trump’s naval build-up in the Caribbean as “the greatest threat [to] our continent in the past 100 years”. But by how much? ■



Power boating

Psephology

Tribal politics

BOSTON

Five Republican factions jostle for Donald Trump's favour

WHAT UNITES the Republican Party today is a near-universal devotion to Donald Trump. But loyalty to the president masks some divisions among Republican voters. Anti-establishment populists jostle with old-school conservatives over tax cuts and welfare. Nationalists cheer the MAGA tariffs that business-minded conservatives loathe. Mr Trump's success has been to bind these factions together.

To map the tribes, *The Economist* analysed data from almost 14,000 Republicans who took part in the Co-operative Election Survey in 2024. Across dozens of policy questions, from zoning laws to TikTok, individual voters are idiosyncratic. But five distinct clusters emerge.

These factions can be plotted along a spectrum. On both immigration and taxation, for example, members of the Culture Warrior tribe are most likely to hold a conservative position, while Moderates are the most pragmatic. Neo-cons, Isolationists and Economic Populists fall somewhere in between (see chart).

The **Moderates** are the only tribe that includes a sizeable minority who are sceptical of Mr Trump. One in five members of this group did not vote in last year's presidential election; one in six voted for Kamala Harris, the Democratic nominee. They tend to be sympathetic to Democratic policies on guns and immigration, while leaning to the right of the country as a whole. Senators Susan Collins and Lisa Murkowski are their champions.

The **Culture Warriors** sit on the opposite side of the party. This tribe is the richest. Its members are the most likely to own a gun and to be born-again evangelical Christians. These voters are the backbone of the party and they are particularly strident on "culture war" issues. Take abortion: 95% of them agree with the decision to overturn *Roe v Wade*. Only 7% agree that semi-automatic rifles should be banned. Senator Ted Cruz and Representative Marjorie Taylor Greene represent this group.

The three remaining tribes are broadly conservative, with some distinguishing characteristics. The **Economic Populists** are defined by their support for more redistributive economic policies, such as welfare spending. This tribe has a similar profile to the voters Mr Trump wooed away from the Democratic Party—they are the poorest segment of the party and the least likely to have a college degree. Senator

Josh Hawley and Vice-President J.D. Vance are their most prominent advocates

The **Neocons**, by contrast, look more like the party's traditional base. They are the oldest, whitest and most educated tribe. They are much more likely to be in favour of sending aid to Ukraine and weapons to Israel. Senator Lindsey Graham and Nikki Haley, the former governor of South Carolina, are their people.

The **Isolationists** are at the other extreme of foreign policy. Some 63% said that America should not be involved in the Russia-Ukraine conflict; 55% said the same for the conflict in Gaza. The Isolationists also tend to be less trusting of institutions. Only 46% of them said they agreed that elections in the country are fair, compared with 64% of Republicans overall. Senators Rand Paul and Mike Lee are not on their

own in this group.

No tribe is big enough to hold decisive sway: being their overall chief requires a balancing act. And despite their differences, the tribes have one big thing in common. Polling for *The Economist* by YouGov shows that more than three in four members of every cluster approve of Mr Trump's performance, though levels of enthusiasm vary. When it comes to policies, the most unifying are building a wall along the Mexican border and scepticism of gender ideology, which command majorities in all five Republican tribes.

Some factions find their anchor in particular institutions. The House is brimming with culture warriors; the Senate, older and more traditional, still hosts neo-cons and some moderates. Across the executive branch the other tribes jostle endlessly for influence. Still some prominent figures come from outside these five tribes entirely—political nomads such as Elon Musk and Robert F. Kennedy junior, the eccentric health secretary.

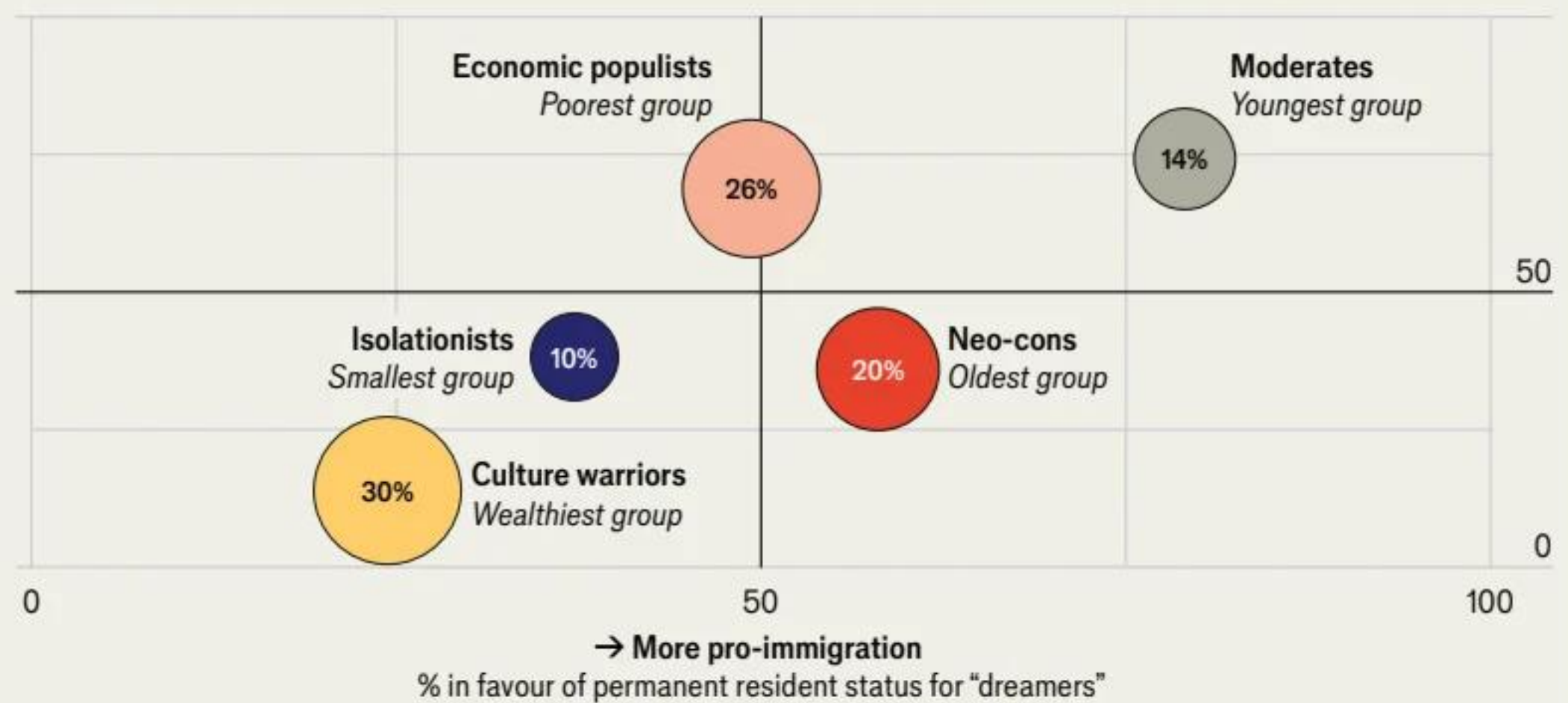
To win the Republican nomination in 2028 Mr Trump's heir must attempt to do what he does: appeal to all of these competing factions, while alienating none. He makes it look easy, yet it is anything but. ■

Five species of elephant

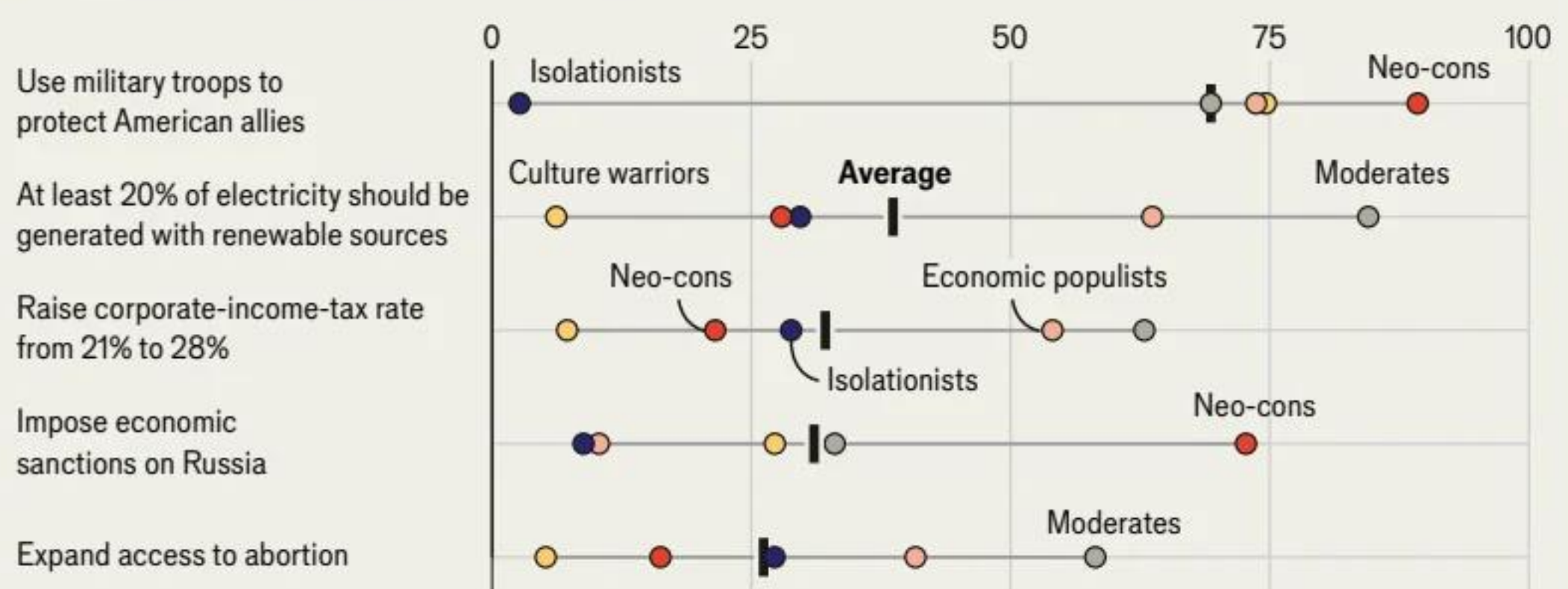
United States, Republican tribes*

○ ○ ○ % of Republicans

↑ More pro-redistribution
% in favour of higher taxes for those earning \$400k+



Policy issues, % agreeing, Nov 6th-Dec 10th 2024



Sources: Co-operative Election Study; *The Economist*

*Republicans grouped by policy preference and ideology

LEXINGTON

A tale of two veterans

One invaded the Capitol, the other burned the flag. Who most deserves prosecution?



AMERICA WAS still fighting fascism overseas in 1945 when its military leaders alerted the troops that the menace could materialise at home, too. The War Department, as the Department of Defence was called until two years later, was issuing “orientation fact sheets” to soldiers, and the 64th edition, “Fascism!”, warned against complacency that America was proof against the danger. It wanted troops to recognise the nation’s vulnerabilities, including in themselves. “We all know that many serious problems will face us when the War is over,” the bulletin read. “If there is a period of economic stress it will create tensions among our people, including us as returning veterans.” Fascists, it continued, would make extravagant promises and then try to divide Americans by pitting racial, religious and economic groups against each other, encouraging them “to hate rather than to think”.

As works of propaganda go, Fact Sheet 64 itself seems to have been out to encourage thought, not just compliance. It was patriotic, yet mindful that the nation was not perfect. It suggested “discussion” points and supplied “supplementary material”, including quotations from Franklin Roosevelt and Adolf Hitler. But it had a simple bottom line: “Only by democratically solving the economic problems of our day can there be any certainty that fascism won’t happen here.” Returning veterans needed to worry about the freedom of every American, because if anyone was stripped of their rights, “our own freedom and all democracy is threatened.”

Compare that straightforward message with the bewildering signals about rights and freedom coming from the administration of Donald Trump. It is prosecuting one veteran who burned the American flag in front of the White House in late August, while honouring another who died invading the Capitol. This is a puzzle that would surely have vexed the writers of Fact Sheet 64: how could the first veteran, in the eyes of the government, be a criminal and a threat to the union, but the second an innocent patriot?

Both veterans were provoked to protest by Mr Trump. Ashli Babbitt, who joined in the attack on the Capitol on January 6th 2021, served 14 years in the air force and National Guard, including tours in Iraq and Afghanistan. She believed the election in 2020 was stolen, and to stop Congress from certifying Americans’

votes, she was in the vanguard of those who overwhelmed police outside the Capitol. An officer shot her as, wearing a Trump flag for a cape, she tried to climb through the shattered window of a barricaded inner door near the House chamber, where trapped congressmen were bracing for battle. A witness, Markwayne Mullin, a Republican who was then a congressman and is now a senator, said at the time the officer “didn’t have a choice” and “saved people’s lives”. Two federal investigations exonerated him. But Ms Babbitt’s family said she would have peacefully surrendered if asked; Mr Trump has said she was “innocently standing there” and that she was “murdered” by a “thug”. This spring his administration agreed to pay nearly \$5m to settle a wrongful-death suit by her family. In 2021 the air force denied her family’s request for a military funeral service, but on August 28th it said it had reversed course after “reviewing the circumstances” of her death.

The other veteran, Jay Carey, was provoked not because he believes in Mr Trump, but because he sees the president as a fraud. On August 25th Mr Trump signed an executive order mandating prosecution for burning the American flag, saying that act challenged “the political union that preserves our rights, liberty, and security”. Mr Carey, who is 54, immediately decided to burn a flag. His duty, he says, was to defend Americans’ right to speech even if he found it offensive— “defend it to my death, because that’s what being in the military is.” He also wanted to show that Mr Trump’s order “was BS, that it had no teeth”.

Indeed, as Mr Trump’s order backhandedly acknowledged, the Supreme Court has ruled that flag-burning is speech protected by the constitution. After being arrested, Mr Carey was charged not with burning the flag but with petty misdemeanours related to lighting a fire on park land. Mr Trump and his top aides have been uncharacteristically quiet about Mr Carey’s defiance, possibly because he successfully called their bluff, or maybe because of his own standing as a veteran. A tank master gunner, Mr Carey served for more than 20 years, in both Iraq wars as well as Bosnia and Afghanistan, and he was awarded the Bronze Star.

Ignorance and strength

Mr Carey, who compares Mr Trump to the Wizard of Oz, thinks he is accumulating power because frightened people let him. “You look behind the curtain, and he’s just a small man trying to make himself seem bigger,” he says. “We’re giving him that power.” Sitting in Washington’s Union railway station, near where he has joined a protest, Mr Carey uses one word for what he thinks Mr Trump has in mind: “Fascism.” With a tattooed hand he gestures towards giant armoured vehicles outside the doors. “Weapons of war,” he says. “That is a combat vehicle. The only way that should be sitting there is because it’s on display for a parade.”

Maybe the writers of Fact Sheet 64 would dispute Mr Carey’s analysis, but they would surely respect his vigilance. The bulletins were part of a morale-building programme created under George Marshall, then army chief-of-staff. He believed the more the troops knew, even about the problems and indignities of military life, the more they would appreciate what was at stake. Mr Trump is taking a very different approach, trying to protect even officers from what he considers to be dangerous information by banning certain books from the libraries and curricula of the military service academies. But he does want to restore one hallmark of Marshall’s days, albeit a superficial one. “As ‘Department of War’ we won everything,” he said recently. ■

The Americas



Mexico's energy (1)

Put that in your pipe and store it

MEXICO CITY

Worries about foreign gas are misplaced

LAST YEAR Mexico imported 2.34trn cubic feet of natural gas from the United States, up by nearly 40% from 2018. The increase is not just down to growing energy demand. Gas has become the backbone of Mexico's energy system. It accounts for more than 60% of electricity generation, largely in combined-cycle plants.

Natural gas is viewed as a "bridge" fuel as countries move away from coal and oil and towards clean energy. Mexico has been making use of its enviable access to the world's cheapest supply of natural gas, produced just across the border in Texas. But that arrangement is politically fraught for President Claudia Sheinbaum.

Until the turn of the 21st century Mexico produced all the natural gas it needed. Then demand outpaced production by Pemex, Mexico's national oil company (see next story). With the monopoly it then had, it produced gas only as a byproduct of its more lucrative oil operations. When gas

output peaked in 2009 and power cuts followed, the shale boom in Texas presented a solution. Mexico built new pipelines and CFE, the state electricity firm, began producing ever more electricity at combined-cycle plants (see chart on next page).

Sweeping energy reforms in 2013 should have reduced Mexico's dependence on the imports. They opened the oil and gas sector to private investment, allowing for expanded pipelines and storage facilities. But when Andrés Manuel López Obrador, Ms Sheinbaum's predecessor, took power in 2018, he kneecapped those plans. Mr López Obrador railed against dependency, but his passion for oil led him to double down on Pemex despite its declin-

ing fields and ballooning debts. He discouraged renewables and dismissed fracking. He suspended pipeline-contract payments, sidelined the private sector and dismantled the industry's independent regulators. Without the money and expertise of outsiders, domestic production of oil and gas stagnated.

As dependency has deepened, it has come to the political fore. Donald Trump's return to the White House stoked fears that he could turn off the taps. In a more general sense Morena, Ms Sheinbaum's party, frets about the loss of sovereignty implied by a reliance on foreign energy.

Should Mexico worry? Mr Trump has shown a readiness to weaponise whatever tools are available to him. Yet Oscar Ocampo of IMCO, a think-tank in Mexico City, says the idea that he would cut off Mexico's gas is "absurd": he has consistently pushed countries to buy more of America's hydrocarbons, not less. And Luisa Palacios, an energy expert at Columbia University, says Mexico absorbs about 70% of America's pipeline gas exports. The dependence is mutual.

Worries over energy sovereignty are shared by many governments. For Mexico, though, some say that is not the real fragility. "The problem is not the supplier. The problem is that we have no storage," says Rosanety Barrios, a former energy official. ▶▶

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▶ When supply faltered during a freeze in Texas in 2021, Mexican factories and homes went dark within hours. The country has storage for just over two days of demand. By contrast, Spain can hold about 30 days' worth; France more than 100.

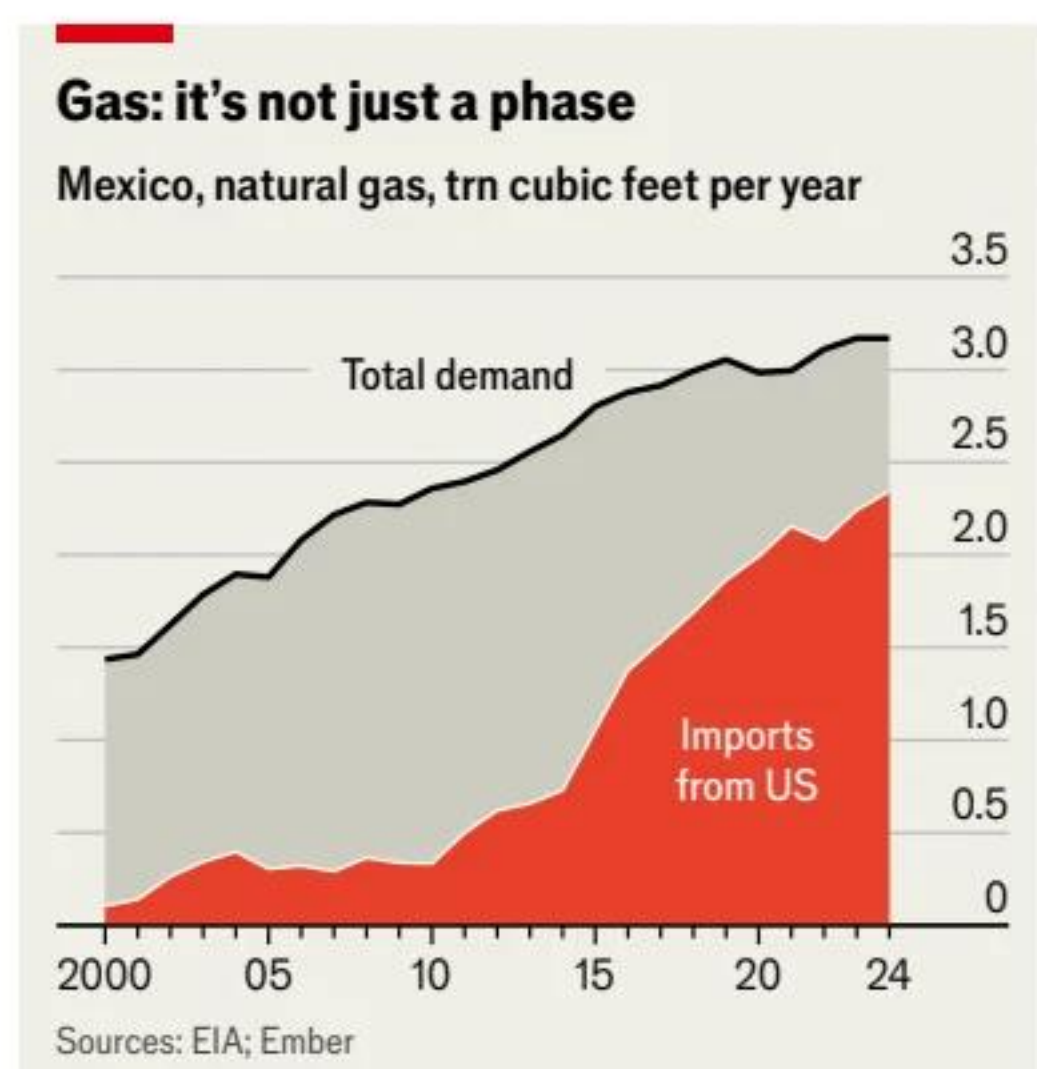
And reliance on cheap gas, says Pedro Niembro of Monarch, a consultancy, has been a "double-edged sword". "It has curtailed the development of new renewable energy," he says. The US Department of Energy reckons Mexico has the potential to produce enough to meet its electricity needs one hundred times over. But last year renewables contributed only 22% of electricity generation, falling short of the target of 35%. That leaves Mexico not only exposed to gas-price swings but also behind its peers in the energy transition.

Ms Sheinbaum, a climate scientist, shares much of her predecessor's energy ideology but has more realistic ideas, though some of them might put her at odds with her Morena party. She has pledged to build storage capacity, upgrade pipelines and raise domestic-gas output by about 25% by 2030. She has also hinted at allowing fracking, though Pemex's boss quickly denied this.

Anti-private bias

Ms Sheinbaum is more welcoming to public-private partnerships than her mentor, but she, too, thinks state firms should predominate. That risks supply. Pemex lacks both cash and expertise. Deepwater gas fields such as Lakach, now being revived with the involvement of Carlos Slim, a telecoms mogul, are costly and technically demanding. Private firms are interested, but the rules—and bitter memories from Mr López Obrador's days—make them think twice. Mr Ocampo says he does not see a way for Mexico to be competitive.

Storage, better grids, policies to keep investors sweet: the path to less dependence on imported natural gas seems clear. Mexico should build the tanks, transmission lines and trust—and perhaps worry less about the taps. ■



Mexico's energy (2)

Propping up Pemex

MEXICO CITY

The latest plan is unlikely to work

WHEN CLAUDIA SHEINBAUM took office a year ago, she inherited a fiscal albatross: Pemex, Mexico's national oil company. It is the world's most indebted state oil firm, with obligations topping \$100bn. Production has slumped and suppliers are running after unpaid bills. Unlike Andrés Manuel López Obrador, her predecessor who tried to revive Pemex with subsidies and patriotic will, Ms Sheinbaum has at least acknowledged the mess. And on August 5th she unveiled a plan.

Pemex's problems go back decades. A giant oilfield discovery in the 1970s made it the economy's motor. Successive governments milked it, starving it of investment. Debt ballooned; corruption flourished; pension obligations swelled. Its exploration-and-production arm still makes money, but refining does not.

The firm's woes deepened under Mr López Obrador, whose vision harked back to the petrol boom of the 1970s. He poured in subsidies, tax breaks and capital injections worth some \$100bn over six years. His government froze a 2013 energy reform, curbed the private sector and ended oil auctions. He doubled down on refineries, building a new one in his home state of Tabasco (it has yet to produce anything on a commercial scale).

Oil production, which peaked in 2004 at 3.4m barrels per day, has fallen to about 1.6m. Natural-gas production has declined, too. Pemex's domestic refineries are inefficient and dilapidated; their high-sulphur fuel oil clogs systems and raises costs and emissions. In 2020 Fitch and Moody's, two rating agencies, downgraded Pemex to junk, calling it no longer just a corporate problem but a sovereign one.

The first part of Ms Sheinbaum's reforms addresses Pemex's considerable financial liabilities. Mexico's government is using a complex arrangement involving a special-purpose vehicle, based in Luxembourg, that issues dollar-denominated bonds due in August 2030. Pemex gets access to the proceeds—so far \$12bn—but keeps the debt off its (and the government's) balance-sheet. Alongside this, the government is creating a 250bn-peso (\$13bn) investment fund, partly financed by development banks, to pay suppliers and bankroll projects. The goal is for Pemex to be financially self-sufficient from 2027 and its debt to fall to \$77bn by 2030.

The plan's second pillar looks at opera-

tions, aiming to boost daily production of liquid hydrocarbons to 1.8m barrels and of natural gas to 5bn cubic feet (from 3.7bn). Pemex is also supposed to invest in renewables such as green hydrogen. "Mixed contracts" with private partners are intended to lure investment.

As the scheme was revealed, Pemex's bonds rallied and Fitch upgraded its rating. Cheaper borrowing will buy some breathing room—but not for long. It is "a bottle of oxygen that will eventually run out," says John Padilla of IPD, an energy consultancy. BBVA, a bank, reckons Pemex will need \$12bn in 2025 and \$20bn in 2026 just to cover maturing debt. That does not count supplier arrears of \$20bn-25bn.

The operational part of the plan, too, will suffer for lack of cash, but also for lack of expertise. Boosting production will be hard. Pemex's current fields are running dry and there have been few recent discoveries. What remains are scraps and complex reservoirs, such as deepwater ones, that are difficult and pricey to tap.

In theory mixed contracts will let private firms provide cash and competence. But deepwater projects need billions and tip-top technology, and by law Pemex must keep at least a 40% stake in them. Shell and Chevron have abandoned exploration licences after disappointing results. Nevertheless, some private firms are quietly showing early interest.

Meanwhile, Pemex's structural shortcomings persist. Its board is dominated by political appointees. Weak independent regulators no longer provide discipline. And its wage and pension bills are eye-watering (workers can retire after only 30 years of service). Pemex needs far tougher measures to slim down and focus, or else it will remain a deadweight on Ms Sheinbaum—and on Mexico. ■



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Haiti's mob rule

You and what army?

The United States proposes a more aggressive plan

LAST WEEK Jimmy “Barbecue” Chérier, the leader of Viv Ansanm, a Haitian gang coalition, made a curious announcement on social media. He said his men would abandon several neighbourhoods in Port-au-Prince, the capital, which they had pillaged. He encouraged residents who had fled in fear to return to their ruined homes.

The name Viv Ansanm, or Living Together, rings hollow to most Haitians, who are dying under the gangs’ yoke. So why this apparent munificence from their leader? Rumours swirled. Was it to placate the United States, which a fortnight earlier put a \$5m bounty on his head? Had he struck a deal with Haiti’s government to show mercy to some of the capital’s people?

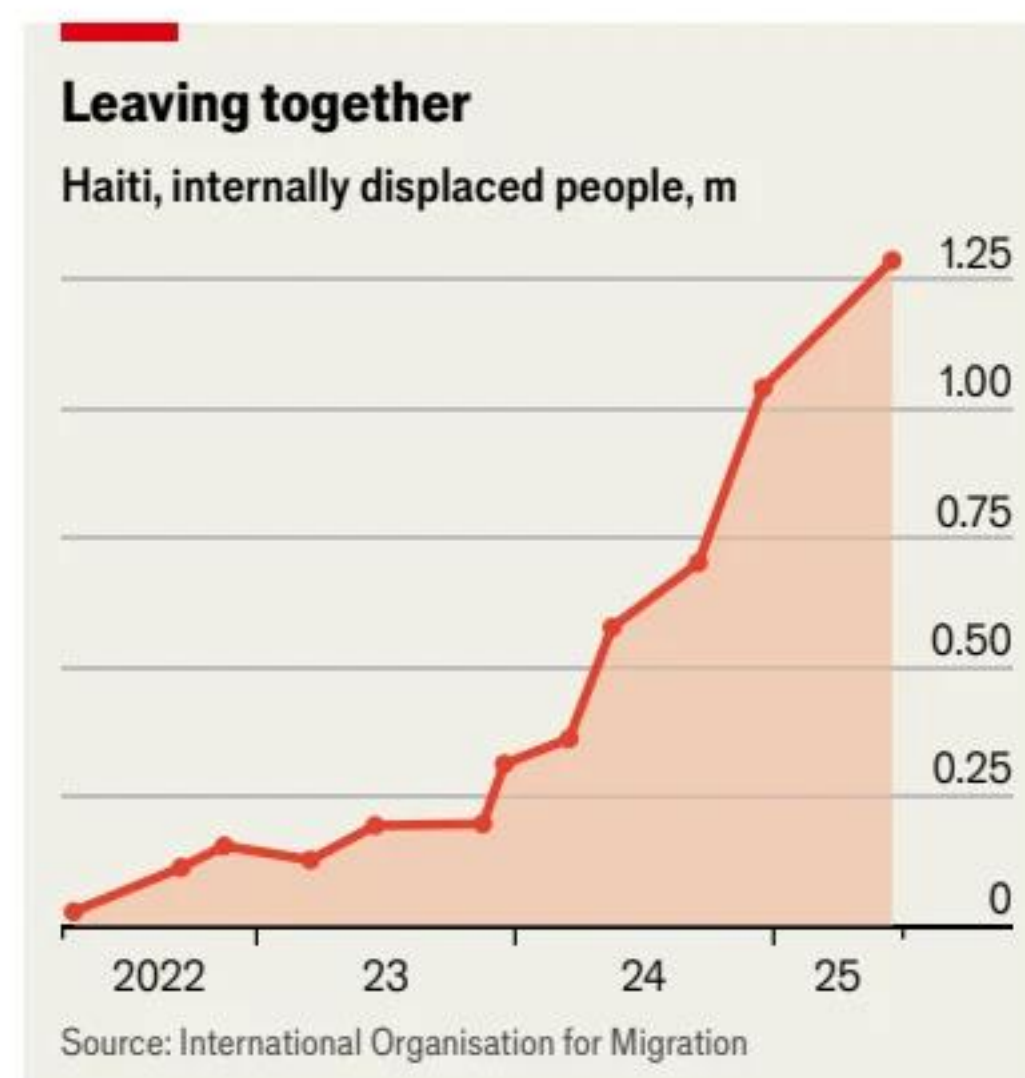
“We’ve seen this before,” says Pierre Espérance, a longtime human-rights activist now leading the National Human Rights Defence Network. “The gangs are gone but the police have not re-entered those neighbourhoods. ‘Barbecue’ will be back in three months.” Perhaps, then, he merely wanted the residents back so they could again be extorted by his men.

Port-au-Prince has in essence been under Viv Ansanm’s occupation for 18 months. A Kenyan-led mission that arrived in June 2024 barely exceeded 1,000 police at its peak, and was never well enough funded to quell the violence. By now more than 11% of the population—1.3m people, half of them children—have been displaced (see chart).

Now the Trump administration has a plan, presented to the UN Security Council on August 28th: the “Gang Suppression Force” (GSF), a 5,500-strong international security operation to be supported by a new UN field office in Port-au-Prince.

Its first hurdle will be to secure support within the UN itself, including the Security Council. China and Russia have little interest in helping the United States resolve problems in its backyard, let alone in getting the UN to pay for it.

Then there is the question of government. Haiti has not had an elected one of any kind since the last president, Jovenel Moïse, was assassinated in 2021. In April last year the unelected cabinet appointed a Transitional Presidential Council to run things. Its mandate expires when an elected president is again installed, or in February 2026, whichever comes first. Given the probability that gangs would kidnap, rape



and loot with impunity during any poll, it is clear which would come first.

And the GSF plan has little budgeting detail. Dipping into the UN’s coffers would yield little. “Haiti remains shamefully overlooked and woefully underfunded,” says António Guterres, the UN’s secretary-general. Only 8% of the UN’s \$908m humanitarian budget for Haiti is actually in the bank—making it, he says, “the least-funded humanitarian appeal in the world”.

America’s plan, therefore, has met with little enthusiasm. “The whole policy is very disjointed,” said Keith Mines, a former director for Latin America at the recently dismantled United States Institute of

Peace. In desperation to find a policy that works, “everybody is just trying to hit any button they can press”, he says.

The simplest button to press would be to get funds. But donors have lost faith in Haiti’s dysfunctional institutions. Last month Laurent Saint-Cyr took over as head of the Transitional Presidential Council, a rotating post. He and the prime minister, Alix Fils-Aimé, are both businessmen, and both are considered to be close to the country’s tainted private sector, which includes people under sanctions imposed by the United States, Canada and the UN.

What troubles Haitians more is that both are also suspected of secretly negotiating with gang leaders, calling to mind the deals reached in El Salvador between that country’s gangs and President Nayib Bukele. There, order was restored, but at the eventual price of mass detentions and widespread alleged human-rights abuses.

Mr Guterres told the Security Council last week that he was “encouraged” by the efforts of Messrs Fils-Aimé and Saint-Cyr, including better co-ordination with the police. But Mr Espérance says simply: “We don’t see that.” Insecurity and lawlessness are only growing, he says. At least 8,000 people have been killed in gang-related violence in the past 18 months, and the UN’s officials warn that extrajudicial killing by the police is on the rise.

Most Haitians lament that shady deals would let gang members escape justice. But how else might they get a return to something like a normal life? An ugly compromise may be the only way out of the nightmare—but one made in the open. Jake Johnston, a veteran observer of Haiti at the Centre for Economic and Policy Research in Washington, says: “There needs to be justice for victims.” That requires far more than just a gang-suppression force. ■



After the gangs have gone

Asia



Indonesian politics

Old habits die hard

JAKARTA

Protests in Indonesia are testing Prabowo Subianto's commitment to democracy

BRIGHT GREEN jackets worn by motor-bike-taxi drivers are everywhere on the streets of Jakarta, Indonesia's capital. Afan Kurniawan, a 21-year-old, was wearing one while delivering food on the night of August 28th. By chance, his route took him through a demonstration outside Indonesia's parliament. As he made his way through the crowd, an armoured police vehicle charged the protesters. It hit Mr Afan and then drove over him, killing him.

Video of the incident quickly spread on social media, outraging Indonesians. The following day thousands of green-jacketed drivers turned out to accompany Mr Afan's funeral procession. Demonstrators flooded streets across the country, demanding accountability for his death and a long list of reforms. After sunset, protest leaders told their followers to go home, but crowds remained on the streets. In the chaos unknown vandals set two regional-parliament buildings alight, in the cities of

Makassar and Mataram. The following day looters sacked the houses of five officials, including Sri Mulyani Indrawati, the finance minister. Student organisers of the protests say that agents provocateurs are responsible for the damage, not them.

The unrest is a crucial test for Prabowo Subianto, a former general who won a landslide victory in last year's presidential election and who has little patience for dissent. In a speech on August 31st he said that he supports the right to peaceful assembly, but that some of the demonstrations tended towards terrorism and sedition. He ordered the armed forces and po-

lice to take the strongest possible lawful actions against rioters. The following day police went after students walking back to campus from a rally, and arrested the leader of a rights-advocacy organisation. But many in Jakarta have decided to stay off the streets, leading to a tense calm.

Mr Prabowo also promised to investigate and hold accountable the police officers responsible for Mr Afan's death, and to deal with one of the protesters' biggest gripes, the behaviour of lawmakers in his mega-coalition, which includes nearly all the parties in the legislature. A plan by MPs to give themselves a housing allowance of \$3,000 a month (in a city where the monthly minimum wage is little more than a tenth of that) will be reversed, he said, and overseas junkets paused. But these concessions do not tackle the root causes of the demonstrations: unhappiness about the economy and Mr Prabowo's attempt to squelch political-party opposition.

On paper, the economy is doing well. Economic growth accelerated to an annual rate of 5.1% in the second quarter, according to official data. Inflation has been docile, near 2%. But beneath the surface there is trouble. The price of some staples has risen faster than broader measures of inflation. A kilo of rice in Indonesia is 34% pricier than three years ago, for example. Meanwhile, the labour market appears to

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► be worsening. Reports of layoffs are pervasive. The number of unemployed university graduates has leapt by 25% since August 2022. Consumer confidence has dipped.

This year the share of bank loans to households that are non-performing has surged to its highest level on record. "I can barely make ends meet, and I hear that members of parliament are enriching themselves," says Dewi (not her real name), a 23-year-old teacher in a town five hours from Jakarta, in central Java province. She says many of her peers have left the country because of poor career prospects.

Mr Prabowo's missteps on economic policy have not helped. In January he ordered an immediate 9% cut to the government's budget. Layoffs and cuts to essential services followed. He ploughed the savings into a free-school-lunch programme and a new sovereign-wealth fund under his direct control. The fund took over state-owned enterprises and now receives their dividends, leading to a sharp drop in the government's revenues. It in turn reduced transfers to local and provincial governments, forcing some to more than double taxes.

In a working democracy, opposition legislators would vent voters' frustration with these policies in parliament, pressing the government to change course. But the other hallmark of Mr Prabowo's administration has been his attempt to shut down opposition by co-opting it. All but one of the eight parties in the lower house have joined the ruling coalition, and Mr Prabowo continues to woo the holdout. Worse, he has talked of making such an arrangement "permanent", suggesting that there would be no tolerance for opposition political parties in the legislature. He argues that this better reflects Indonesian culture than adversarial systems do, harking back to the political set-up under Indonesia's first president, Sukarno.

If protests resume, how will Mr Prabowo respond? He could use them as a chance to consolidate power. In 1998 he allegedly worked with Islamist thugs to sow discord during the dictatorial rule of Suharto, his father-in-law—supposedly so that the unrest would allow Suharto to declare martial law and remain in power. Mr Prabowo has always vehemently denied that he worked with the thugs. And the unrest cost Suharto the support of his cabinet, leading him to step down. Some observers think that Mr Prabowo is now using agents provocateurs as a pretext to amass power and crush dissent. Unlike this father-in-law, he would be unlikely to resign.

But one foreign diplomat who knows Mr Prabowo well doubts that he will resort to repression or violence. "Like all populists, he wants to be popular," the diplomat says. Disorder does not serve that end, nor would a crackdown. ■

Indian warplanes

A Soviet relic is retired

The MiG-21 served in every Indian war for 50 years. It leaves a big gap

IN 1963 INDIA was in a tricky spot. It had just been thumped by China in a war in which the Indian Air Force (IAF) had stood by helplessly. America had sold Pakistan advanced fighter jets a few years earlier. Enter the Soviet Union's MiG-21. The fighter jet propelled India into the supersonic age, cementing the country's reliance on Soviet hardware. On September 26th, after 62 years of service, India will retire a warplane that came to acquire iconic status—and a reputation for killing its pilots.

The MiG-21, which is still operated by several countries, was created in the 1950s as a lightweight interceptor, designed to climb fast to reach the enemy over short distances. It quickly became the workhorse of the Indian fleet: around 900 aircraft passed through the IAF, most of them made in India under Soviet licence. The early version, celebrated for shooting down Pakistani planes in the 1971 war over Bangladesh, was used for air-to-air combat within visual range. A later version, the MiG-21 Bison, equipped with a better radar, could strike at longer distances.

In 2021, on the 50th anniversary of the liberation of Bangladesh, India's then president presented his counterpart with a replica of the MiG-21, reflecting the esteem in which it was held. But the adulation always sat alongside unease. The jet's wing design, narrow tyres and turbojet engine generated maximum power only at high air-

speeds. This meant that flying too slowly on landing could be deadly. Over 400 Indian MiG-21s crashed over 60 years, killing 200 pilots and 60 civilians, resulting in a grim moniker from the Indian press: the flying coffin. The latest crash was in 2023, when an accident killed three villagers.

That did not stop the IAF from pressing the jet into service long after it became dangerously vulnerable to modern technology. In 2019 a Bison was sent up to meet Pakistani jets during tit-for-tat air strikes, because it could get to the action quicker than India's newer but much heavier Su-30. It was promptly shot down. Its extravagantly moustachioed pilot, Wing Commander Abhinandan Varthaman, pictured sipping tea in Pakistani custody, acquired cult status on his return. Indian officials claim that in 2019 the MiGs shot down Pakistan's American-made F-16s. Western officials dispute that. When India launched air strikes on Pakistan in May this year, the MiG-21s were used again.

In practice, the IAF had assumed it would start getting rid of its MiGs in the 1990s, like many other countries. Their long service had nothing to do with the plane's legendary history, but rather with a lack of alternatives. The plan was that the Tejas, an Indian-designed and -built jet, would take over its duties. But the Tejas was slow to arrive and was disliked by many in the IAF. At the same time, India's



No longer flying high

government ploughed cash into upgrading a pair of French and Russian jets, the Mirage-2000 and MiG-29, and into buying a new French one, the Rafale, rather than replacing the huge MiG-21 fleet wholesale. That has left a motley fleet of jets.

Modern jets are more capable than older ones; one Rafale might do the work of several MiGs. But quantity still matters. They cannot be in two places at once. India lost five jets to Pakistani missiles on the first night of the conflict in May, according to Western intelligence assessments. China now has around three combat aircraft for every Indian one, a higher ratio than a decade ago. As the MiG-21 flies into the sunset, that gap could grow. ■

Sri Lanka

Grace period

COLOMBO

The Sri Lankan government's honeymoon is nearly over

OPENED IN AUGUST with the stated ambition of making Sri Lanka “India’s Macau”, the City of Dreams development in downtown Colombo houses a casino, luxury hotels, high-end shops and a champagne-and-cocktail bar “floating amid the clouds”. The gleaming but for now largely deserted halls of the vast complex seem a symbol of renewal: a far cry from the mass civil unrest of just three years ago and the accompanying economic collapse—rampant inflation, fuel shortages, mass poverty and foreign-debt default.

Sri Lanka has indeed staged a remarkable recovery. But for a country still grappling with the effects of an economic implosion, combined with the scars from a bloody 26-year civil war that ended in 2009, recovery is not good enough. Sri Lanka still craves political stability, economic growth and national reconciliation.

At least for now, it has the first of these. A year ago, fed up with years of incompetence under the mainstream parties, Sri Lankans elected a new president, Anura Kumara Dissanayake (known as AKD), and then in November gave his National People’s Power (NPP) coalition a huge parliamentary majority. The NPP is dominated by the Janatha Vimukthi Peramuna party (JVP), which led two armed insurgencies in

the 1970s and 1980s espousing an ideology uniquely combining Marxism and Sinhala-Buddhist nationalism. In government, however, it has meekly accepted an IMF programme negotiated in 2023 by the previous president, Ranil Wickremesinghe.

AKD remains personally popular, according to analysts in Colombo. His government is widely praised as marking a clear break from the cronyism and nepotism that it supplanted. It has pursued corruption allegations against its predecessors, including Mr Wickremesinghe, who was arrested on August 22nd, accused of using state funds for a private trip to London in 2023 (he denies wrongdoing and insists that state funds were not used for this trip). Harindra B. Dassanayake, a Colombo-based analyst, says the NPP has successfully transformed Sri Lanka’s “axis of polarisation” from the “national” question about the status of Tamils to one defined by popular resentment of a corrupt elite.

In this it is helped by a divided and discredited opposition made up of three main parties, one led by Mr Wickremesinghe, and two by the sons of other former presidents. None articulates a clear vision of what they would be doing differently. One of them, Namal Rajapaksa, son and nephew of two former presidents blamed for the policy blunders that led to the debacle of 2022, thinks that to gain power in future, an opposition coalition will be needed. He accuses the JVP of “100% following the Chinese Communist system, so they have total control of things”. It is true the JVP has a Leninist structure—central committee, six-man Politburo and all—so where power lies is not transparent.

So far, it has disappointed those supporters who hoped for radical change, and its honeymoon may be drawing to a close. Thanks to the IMF programme, swingeing



Initial popularity

A rocky ride

Sri Lanka, % change on a year earlier



austerity measures, debt-rescheduling and the global post-covid recovery, inflation has been reined in, with prices largely stable year-on-year. Tax revenue as a share of GDP has climbed from a low of 7.3% in 2022 to an estimated 13.9% this year. Sri Lanka’s economy is growing again—by 5% last year (in line with the government’s and the IMF’s medium-term target). But the growth forecast for this year and the next two is a measly 3-4%. Anil Jayantha Fernando, the deputy finance minister, concedes that this level of growth is “not adequate”.

And that’s before tariffs

Mr Fernando is also “highly worried” about persistent poverty. GDP per person has only just caught up with its level in 2018. And, most worrying for a government elected to help the poor, a World Bank report in April found that the poverty rate, with the line set at \$3.65 per person per day, is at 24.5%, nearly double what it was in 2019. Malnutrition had increased among children under five from 12.2% in 2021 to 17% in 2024; household incomes remain well below pre-crisis levels.

Nor is it obvious where growth and prosperity are to come from by 2028, when principal payments on Sri Lanka’s debt step up sharply. The composition of Sri Lanka’s exports has not changed much for decades: dominated by tea, rubber and, above all, apparel, which accounted for 38% of goods exports in 2024, with some 40% of that going to America.

Many in Sri Lanka were relieved at the number the country drew in the Donald Trump tariff lottery in July—just 20%, the same as Bangladesh, a competitor, only a smidgen above the 19% applied to South-East Asian rivals such as Indonesia and Thailand, and far below the punitive 50% India faces. Hasitha Premaratne, managing director of Brandix, one of Sri Lanka’s largest garment exporters, says the uncertainty has been a big problem, but that order volumes have not yet dropped.

The government is investing great hope in tourism: City of Dreams is, in a sense, ▶▶

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BANYAN

A lesson in Trump-charming

South Korea's new president avoids a Zelensky moment in the White House

DONALD TRUMP took to Truth Social hours before meeting South Korea's new president on August 25th. He accused Lee Jae Myung's left-wing government of purging its conservative opponents: "WHAT IS GOING ON IN SOUTH KOREA?" Mr Lee's advisers feared they might be heading for a "Zelensky moment" in the Oval Office. Yet Mr Lee kept his cool, starting by praising the president for his gilded renovation of the White House. Mr Trump's tone quickly changed: "We're going to get along great," he declared.

The summit capped a deft diplomatic debut for Mr Lee, who took office in early June after the impeachment of his predecessor, Yoon Suk Yeol. The new president had little experience overseas: he grew up impoverished, became a labour activist and rose through South Korean politics as a local official. He campaigned promising a pragmatic foreign policy, but critics doubted he would follow through. So far, however, he is delivering.

Mr Lee's trip began with a groundbreaking stop in Tokyo. As the leader of the opposition Democratic Party (DP), Mr Lee slammed Mr Yoon for pursuing a rapprochement with Japan; DP administrations tend to be confrontational with South Korea's former colonial overlords. But in Tokyo Mr Lee endorsed closer co-operation between the neighbours; while he raised their bitter past, he did not dwell on it. He became the first South Korean leader to make Japan his first foreign destination since the two countries normalised relations in 1965.

Mr Lee probably felt confident doing so because of big shifts in public opinion at home. Some 63% of South Koreans now have favourable views of Japan, up from a nadir of 12% in 2020. South Korea

and Japan also share challenges, from demographic change to aggressive neighbours. Mr Lee said his meeting with Ishiba Shigeru, Japan's prime minister, ran longer than planned because the two were discussing how to negotiate with their increasingly unpredictable ally, America.

Mr Lee arrived in Washington well-versed in the art of dealing with Mr Trump. He lauded the president for overseeing a manufacturing "renaissance" and a booming stockmarket. He came bearing gifts, including a custom-made golf putter, taking a page from the book of Abe Shinzo, Japan's former prime minister, who used a set of gold-plated clubs to charm Mr Trump. When Mr Trump took a liking to Mr Lee's fountain pen, the South Korean leader handed that over, too.

On substance Mr Lee also delivered lots of goodies. In a speech at a think-tank in Washington, he pledged to spend more on defence and declared that South Korea would no longer rely on America for security and on China for economic prosperity—a practice Trump administration officials have condemned. South Korean

business leaders announced big investments: Korean Air pledged to buy 103 new jets from Boeing, its largest-ever order. Mr Lee also stopped in Philadelphia to highlight his country's support for reviving America's dilapidated shipbuilding industry. South Korea has dubbed the effort MASGA: Make American Shipbuilding Great Again.

Mr Lee did not come away empty-handed. Mr Trump, for now, backed off talk of withdrawing American troops from South Korea. Mr Lee asked Mr Trump to help revive talks with North Korea's dictator, Kim Jong Un, musing about playing golf at a Trump Tower in North Korea in the future. South Korea has also managed to open discussions about allowing it to enrich and reprocess nuclear fuel. South Korean officials insist such capabilities are needed to strengthen their civil nuclear industry—but they would also make it much easier for the country to assemble nuclear weapons of its own. (America, worried about proliferation, has blocked South Korea from having that capacity.)

Beyond the bonhomie, plenty of stumbling blocks remain. Though South Korea concluded a deal with America that will see its tariff rate set at 15% (the same level as Japan), the details remain unsettled. Just days after Mr Lee left Washington, America announced new restrictions on South Korean chipmakers' operations in China. While leaning closer to America, Mr Lee nonetheless hopes to continue balancing between the two superpowers—while he was at the White House, he quietly dispatched special envoys to Beijing, bearing an invitation to Xi Jinping to attend a summit of Asian leaders to be held in South Korea in late October. The true tests of Mr Lee's pragmatism still lie ahead.



▶ official policy. Arrivals rose from 1.5m in 2023 to 2m last year, and the government is hoping for 3m this year, but the industry complains it is not doing enough to promote the country. Sri Lanka's legion of overseas workers, whose remittances reached nearly \$700m in July, are also contributing to what is now a current-account surplus. Economists say these workers' composition has changed. They are still mainly domestic servants and construction workers in the Middle East, but a

growing proportion comes from the earnings of higher-paid professionals. Many have left for good. A population of 23m has produced a diaspora between 2m and 3m.

The diaspora is also seen as an important source of potential investment. But its willingness to return is impeded by the bitterness left by the war, and the massacre of civilians that accompanied the government's victory, in which a UN panel of experts estimated as many as 40,000 civilians were killed. Tens of thousands of people

disappeared during the conflict, which was fought over the failed bid by the Tamil (largely Hindu) minority in the north and east to secure its own homeland.

Last year the NPP and AKD won many votes in the Tamil north, partly on hopes they would begin to tackle Tamils' grievances. But local-election results in May, in which the NPP did less well, suggested disillusionment had already set in. On that issue, too, its honeymoon cannot be extended indefinitely. ■

China



Urban life

The connected future of China's cities

BEIJING

China wants millions of acres of urban sprawl to become high-tech, liveable cities

IN THE FIRST decade of Xi Jinping's rule, builders in China poured more concrete than America did in all of the 20th century. Urban areas expanded by 40%. No longer. In the past five years the debt-fuelled property market has slumped. Evergrande, once China's largest developer, has collapsed: on August 25th it was delisted from Hong Kong's stock exchange. Many cities today are plagued by sprawl, smog and gridlock, and are littered with tens of millions of empty flats. China's leaders say they want a new approach, aimed at making cities more pleasant rather than more massive. That is far harder than it sounds.

On August 28th the Communist Party published an ambitious plan. By 2035 it wants cities to be "liveable, beautiful, resilient, civilised and smart". The hope is that they foster the growth of innovative, high-tech firms and house consumers increasingly willing to spend on nearby shopping, restaurants and services. New digital tools,

many turbocharged by artificial intelligence (AI), will help cities run more smoothly. Pollution and traffic jams could become far less common. Read between the lines, however, and it is clear that the party also wants state-of-the-art surveillance systems to boost its control.

China's megacities remain among the world's largest. Shanghai holds 22m people; Beijing 19m. The 50 largest cities account for more than half its GDP. When Mr Xi took power in 2012, about half of the population was living in urban areas. Now, two-thirds do, an increase of some 220m people—more than the population of Bra-

zil. The urbanisation rate is still lower than that of most rich countries: America's is over 80%. But China's may hit 70% by 2030.

Many cities in the north-east, a chilly rustbelt, are shrivelling as their citizens hunt economic opportunities on China's southern and eastern coasts (see map on the next page). Overall, the movement of people from villages into urban areas is slowing. In the 2010s the urbanisation rate was increasing by 1.1 percentage points a year on average; in the 2020s that has dropped to 0.6 a year. But officials have never seemed keen on unchecked internal migration. The *hukou*, China's residency system, has controlled movement by excluding rural migrants from access to schools and other benefits. Smaller cities have largely ditched *hukou* restrictions, but Beijing and Shanghai remain unfriendly to migrant workers.

In the party's new plan, "city-clusters" will be increasingly powerful engines of growth in the next decade and beyond. They are the means through which the rest of the plan will be realised. These clusters consist of one or two large hub cities and their smaller neighbours, linked by high-speed rail. Nearly a decade ago officials picked out 19 potential clusters, including three critical coastal ones: Beijing-Tianjin and neighbouring areas (known as Jingjin-ji); Shanghai and other cities in the Yangzi

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▶ River Delta; and Hong Kong with its neighbours in the Pearl River Delta.

Some clusters are already hives of industry. Perhaps the most promising is in the Pearl River Delta, says Dan Wang of Eurasia Group, a consultancy. The Greater Bay Area (GBA), as that region is known, contains 86m people across vibrant cities such as Guangzhou, Shenzhen and Hong Kong. Infrastructure is the key to its continuing success—and the success of clusters that wish to emulate the GBA.

Laying tracks between huge labour markets allows employees, knowledge and innovation to spread quickly. Shenzhen's underground train tracks already stretch for 600km (London's are around 400km long), and another 200km are under construction. Guangzhou's are 700km long. Better links could give the GBA a productivity boost comparable to the one British cities enjoyed in the wake of the Industrial Revolution, reckons Alain Bertaud of New York University.

Officials also hope more "liveable" city-clusters can help spur consumption that the spluttering economy needs. Deng Anqing, a 40-year-old from a village in central China, moved to Beijing in his 20s but was unable to afford a house until 2022 when he moved to Suzhou, a canal-crossed city on the Yangzi River Delta. It hardly matters that Suzhou has fewer white-collar jobs. He can still work at a publishing firm in Shanghai—just 30 minutes away by bullet train. And he feels freer to spend. "Now that I have my own home in Suzhou, I buy the furniture I like, all kinds of things I like, and I can decorate," he says. "There's a sense of belonging."

Hangzhou, another city in the Yangzi Delta cluster, is a model for how clusters are trying to use "smart" technologies to improve city life. It feeds data from cameras, government records, traffic lights and police reports into a "city brain" powered by AI, aided by Alibaba, a local tech giant. Officials claim that analysis of the brain

has helped them track pollution, reduce congestion and aid emergency services. This year the brain was also upgraded to provide digital services for Hangzhou residents. Other cities round China are racing to build their own brains.

But the ubiquitous street cameras of these "smart" cities also provide a real-time window for the police on potential trouble spots. China's cities typically have low levels of crime, but officials are paranoid about protests. High-tech surveillance is coupled with the old-fashioned sort. Civilian volunteers watch out for suspicious street activity. Their observations can then be uploaded to the brain.

Difficult questions remain over how exactly China will manage to turn its city clusters into world-beating champions. For one thing, the party's new plan says there must be no "large-scale expansion" of cities. Instead of pouring concrete, the emphasis will be on improving what is there already. ANZ, an Australian bank, es-

timates that more than half of new demand in China's property market over the next decade will stem from upgrading existing houses rather than building new ones. Stung by the property slump, officials say flats should be built for use as primary residences, not as investments, and flashy skyscrapers will be discouraged. They will also direct urban development projects; consultation with citizens will be minimal.

Another issue is how to pay for improvements. There are no cost forecasts in the party's new plan for cities. Just patching up basic urban infrastructure like drainage systems and ageing gas pipelines could cost 4trn yuan (\$560bn) over the next five years, according to a previous estimate by the state planning agency. That leaves aside spending on fancier projects like data centres to power city brains. "People-centred" reforms under discussion will not be cheap either, from making public services more open to migrants from the countryside to subsidising rented housing ▶▶

Social shortcuts

Melted ice-cream or carbonara sauce?

Chinese youth rebel through weird and wacky life hacks

PICTURE YOURSELF as the hero in a Chinese martial-arts novel. Intent on honing your powers or perhaps attaining immortality, there are two paths available to you. Do you choose *zhengxiu*, the orthodox one that typically demands decades of meditation in a cave? Or do you risk *xiexiu*, the heretical way? It is swifter. But it also involves moral compromise. In the novels, those who opt for the latter usually end up either corrupt or dead. Traditional mores warn against those who cheat established systems.

But *xiexiu* has acquired a new lease of life among certain youngsters. Detached from its literary origins, it now denotes a departure from the proper way: more efficient, more creative or simply less bound by convention. In recent months videos tagged with the term have drawn billions of views on Douyin and Xiaohongshu, a pair of social platforms. Businesses have joined the fun, selling products in strange combinations. Some departures are just rebranded life hacks, such as rendering lard in a microwave or learning English through fan fiction. Others veer into the absurd: reading advanced mathematics as a cure for insomnia, dining in the nude to shame oneself into getting in shape or melting ice cream to make carbonara sauce.

Many of those embracing the trend are young adults, who see *xiexiu* as a middle path between striving hard ("996" office culture in China pushes unfortunate employees to work from 9am to 9pm, six days a week) and "lying flat" (resigning oneself to lacklustre employment to avoid intolerable stress). More than a shortcut, *xiexiu* signals disillusionment. A wobbly economy, rising housing costs and shaky job prospects have already made the path through adulthood more precarious. In July, the unemployment rate for people aged 16 to 24 in cities stood at 17.8%. So why not stray towards *xiexiu*?

Last month, the social account of *Guangming Daily*, one of the party's main mouthpieces, declared the fad a cheerful way for the young to counter uncertainty and gain initiative. The commentary stopped short of calling it a rebellion, instead describing it as "a way to seek improvement". Easier perhaps, to let the young channel their angst through quirky hacks than to confront the sticky truth about their prospects. But an inclination towards *xiexiu* should not be dismissed. "Heretical practice isn't really about teaching you how to cook—it's teaching you how to rethink," reads one clear-eyed comment.

Spot the trend

China*, urban population, % change 2010-20

○ 10 ○ 50 ○ 100

■ Increasing ■ Decreasing



*Top 20 growing and shrinking cities ranked by absolute change
Source: Population Census

Mainframe data: your hidden AI goldmine

In today's AI-driven business landscape, a company's most valuable competitive advantage might be locked within mission-critical systems

Despite handling 70% of global transactions, mainframes remain an enigma to many. Only 28% of organisations leverage their mainframe data effectively, with 76% of leaders admitting they struggle to access and understand this critical information, according to a recent study by Foundry*.

This disconnect creates an obvious hurdle for companies seeking to leverage AI for everything from fraud detection to customer experience enhancement. Financial institutions, for example, could identify suspicious patterns in transaction data to prevent costly account takeovers – if only they could access the information they hold across disparate systems.

“To truly understand the current state of your business at any given time requires the ability to see what's going on in mainframe systems,” explains Michael Curry, president of data modernisation at Rocket Software. The challenge is teasing out individual strands from what amounts to a huge spaghetti bowl of data.

Rather than pursuing risky or costly system replacements, Rocket Software helps forward-thinking organisations unlock their mainframe's potential by implementing comprehensive data mapping strategies. This approach allows companies to catalogue their data landscape across all environments – documenting what exists, where it resides and how it interconnects.

One Rocket Software customer, a US bank, successfully implemented this approach to map its entire data ecosystem across cloud and on-premises environments, including mainframes. The results were transformative: enhanced regulatory compliance through improved data lineage tracking, superior customer service with real-time account information and more personalised financial advice based on comprehensive customer insights.

“Soon, the origin of data – whether on a mainframe or in the cloud – will no longer matter,” says Michael Curry. “What will matter is the intelligence we can extract, the decisions we can make, and the value we can create.”

As AI continues reshaping business landscapes, partnering with specialists like Rocket Software enables organisations to transform complex legacy data into a strategic business advantage that drives innovation and growth.

Read more at
rocketsoftware.com



 **Rocket** software

*Source: <https://www.rocketsoftware.com/en-us/insights/rethinking-role-mainframe-data-enterprise-ai-and-analytics>

▶ for new graduates. Cities used to be able to rake in cash by selling land to developers, but this only exacerbated the property frenzy. Big fiscal reforms are therefore still needed to help local governments find new sources of revenue.

How to adapt to a changing climate is also a challenge. Drought already afflicts the city-cluster around Beijing. Much of its drinking water has to be pumped from southern sites that are hundreds of kilometres away. And both the GBA and the Yangzi River Delta are vulnerable to typhoons and rising sea levels. (China already loses 1% of GDP to floods each year on average, the World Bank estimates.) The government is building more sea walls, with over 400km under construction at present. And it is also trying to “spongify” urban areas, so they can absorb rain more efficiently, by creating more parks and artificial wetlands.

A test case for China’s urban plans is Xiong’an. A pet project of Mr Xi, who has called it a “city of the future”, it has been under construction since 2017 in wetlands south of Beijing. It is supposed to embody the party’s green, high-tech vision of urban life. But despite 835bn yuan of spending, it has yet to become a “hub of innovation”, as state media describe it. China’s old approach to cities is over, but its new one has yet to prove itself. ■

Getting to America

Changing their minds

Far fewer Chinese migrants are trying to sneak into America

AH GAN, a partially blind Chinese man in his mid-40s, crossed the US-Mexico border in the summer of 2024. He spent three months traversing the jungles and deserts of the Americas with his wife and two children in pursuit of a dream. America meant freedom and opportunity, he thought, a chance to escape the political censorship and economic malaise of post-pandemic China. One year later, his family is barely getting by on his wife’s delivery-job income. Ah Gan worries that she will be detained by masked agents of the US Immigration and Customs Enforcement (ICE) roaming the streets. He has escaped Chinese censorship, but now fears speaking ill of the Trump administration. “I never thought I’d have to worry about speech crime in America,” he says. “It’s tragic.”

Ah Gan, who asked to use a pseudonym for his protection, is one of more than 67,000 Chinese migrants who flowed across America’s southern border between

2022 and 2024. A small number were genuine asylum-seekers fleeing political persecution. Most were economic migrants, some of whom wanted to live in a freer society replete with opportunity. Almost all applied for asylum as a way to stay in America and work despite having crossed the border illegally. They hoped to join the 2.2m immigrants from mainland China already living in America.

Since then the flow of migrants has slowed to a trickle. At the peak in December 2023, nearly 6,000 Chinese migrants were crossing the southern border each month. But in July this year only 80 encounters were recorded. Ecuador’s suspension of visa-free entry for Chinese nationals in July 2024 is one reason. It blocked the main route Chinese migrants were taking into the United States via South America. The other is Donald Trump’s crackdown at the border. On the campaign trail he promised to stop Chinese newcomers specifically; he claimed, without offering evidence, that they were “building an army”. Asylum acceptance rates have gone down, from 50% for Chinese applicants nationwide in mid-2023 to 20% in May 2025.

Yet deportations remain rare because relations between the two countries are at a low ebb. China stopped accepting American flights full of returnees in 2018 amid trade tensions and diplomatic squabbling. Deportations then only resumed in June 2024. The Biden administration oversaw just five large removal flights. Only one has taken place since Mr Trump’s second term began, according to public records. China is “not refusing, but not co-operating enthusiastically either”, says Chen Chuang-chuang, a New York-based lawyer who works with Chinese migrants. Mr Trump has successfully used tariffs and sanctions to press other countries into receiving deportees—but not China.

What are the risks of return? Those deported to China are usually detained for a few days, interrogated, fined and released, says Mr Chen. Some have their passports confiscated. They may also be charged with illegal border crossing, which is punishable by up to one year of imprisonment (or three in extreme cases). Some migrants now think it is not worth staying in America and have returned to China voluntarily to avoid these risks. Others discuss moving to countries such as Canada. Genuine asylum-seekers will face much harsher punishment if they return to China. Most are keeping their heads down, says Liu Zhuohua, a political dissident who crossed the Darién Gap, a stretch of rainforest between South and Central America, and reached the United States in 2023 after spending years in prison for “subversion of state power” in China. “It’s a lot of psychological pressure,” he says. “But I’m not going back, no matter what.” ■



All eyes on China’s massive parade

On September 3rd China held its first parade in six years, commemorating the 80th anniversary of the end of the second world war. It marks the day in 1945 when Japan’s army surrendered to the Chinese government. The military extravaganza was presided over by Xi Jinping, China’s leader. “Today, humanity again has to choose between peace and war, dialogue and confrontation, win-win co-operation or zero-sum games,” he declared. New weaponry wowed spectators: supersonic and hypersonic missiles, underwater drones and robot wolves were all on display. Also in attendance were 26 national leaders, including North Korea’s Kim Jong Un and Russia’s Vladimir Putin. In response, President Donald Trump accused the pair of conspiring against America with Mr Xi.

Middle East & Africa



The West Bank and Gaza

A horrible convergence

The war in Gaza has emboldened Israel's settlers in the West Bank

ON SEPTEMBER 1ST, as Israeli children began the school year, toddlers entered their new nursery in Homesh, a Jewish settlement in the occupied West Bank. Like many other Israeli schools and nurseries in the West Bank, it was built with government support and funding. But Homesh is different: it was one of the settlements dismantled 20 years ago under Ariel Sharon's "disengagement" plan, when Israel withdrew from Gaza and a small part of the West Bank.

For settlers and their far-right allies, Homesh's reopening is a vindication. They long vowed to return to the evacuated settlements; now, with a handful of families back, they have their first success. It shows the sway settlers hold today. Israel's war in Gaza has emboldened them and their political allies; they are increasingly applying their tactics in Gaza to the West Bank.

"The children who will start their day here with laughter and singing are the true

answer to anyone who thought the settlements would be uprooted," said Bezale Smotrich, Israel's finance minister, at the opening of the nursery in Homesh. Mr Smotrich, himself a settler and one of the most powerful members of Binyamin Netanyahu's government, made no specific reference to the settlements abandoned in 2005 in Gaza. But since the war there began 23 months ago, he has taken part in rallies where religious-nationalist groups have openly called for the displacement of the 2.1m Palestinians living in the Gaza Strip and for mass settlement by Israelis.

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Mr Netanyahu insists that Israel does not intend to remain in Gaza. But he has offered no timeline or path for withdrawal. Gaza's devastation may be leading to the eventual fulfilment of the vision long championed by Mr Smotrich and his allies: permanent Israeli control and the displacement of Palestinians, in Gaza and in the West Bank. Orit Strock, the settlements minister and a party colleague of Mr Smotrich, last year described the situation as "a period of miracle".

In Gaza that "miracle" has seen tens of thousands killed, over 70% of buildings destroyed or damaged and Gazans pushed into embattled enclaves covering around 25% of the territory. These will shrink even further as the Israel Defence Forces (IDF), which has begun its latest assault on Gaza city, advances again. New routes paved by the IDF bisect the narrow coastal strip, it says for military purposes. But settlers have drawn up maps of potential communities that correspond to these areas. Settler organisations are already recruiting people for planned outposts.

That same agenda is advancing in the West Bank. Half a million settlers currently live there among 3.3m Palestinians. But their grip on the land matters more than their numbers, and it is tightening. Over 100km of new roads (for Israelis only) have been cut through Palestinian areas over the



► past couple of years, cementing Israeli dominance. At the same time the government is authorising new building projects. Last month it greenlit 3,750 settler homes in the West Bank. Most are in the E1 project, strategically placed to cut the West Bank in half and prevent contiguity in any future Palestinian state (see map). “There isn’t much demand now for these homes,” admits an Israeli housing official. “But the point of the settlers is to establish control in as many points as possible.”

Beyond official policy, settlers use violent intimidation to expand control. They have forced members of isolated rural Palestinian communities to abandon their homes and farms. This has often taken place with the tacit support of the IDF, which has protected settlers in clashes with Palestinians. Senior officers deny this is official policy; they claim it is the result of the “unsanctioned initiatives” by low-level commanders and individual soldiers.

Yet Israel’s operations in the West Bank increasingly echo those it employs in Gaza. Assaults on militant strongholds in Jenin and Tulkarm, cities nominally under Palestinian Authority control, have become prolonged campaigns that have flattened entire neighbourhoods and displaced around 40,000 Palestinians.

Gaza’s war is shaping the West Bank, the core of a Palestinian state, in other ways. France, Britain, Canada and Australia, frustrated at their inability to end the killing in Gaza, plan to recognise Palestinian statehood this month. Other Western countries that were once keen allies of Israel may do the same.

Recognition may be a powerful symbol, but it will not make a Palestinian state a reality. Worse, it risks accelerating what is already happening on the ground. Some Israeli ministers have been urging Mr Netanyahu to formally annex the West Bank in response. Mr Netanyahu has suggested doing so before, usually during election

campaigns to rally his nationalist base. But he has held back under pressure from America and more recently as a result of the Abraham accords, whereby Israel established diplomatic ties with some Arab states. Israel promised the United Arab Emirates that annexation was off the table.

A range of Israeli ministers are proposing everything from a “symbolic” annexation of some settlements to establishing Israeli sovereignty over 82% of the West Bank, with the main Palestinian cities left in isolated enclaves. “Netanyahu doesn’t want to rock the boat too much and is happy for annexation to hover as a threat, without deciding on a clear strategy. Just as he has done regarding Gaza,” says an official. Even if Israel hesitates over annexation, by letting his far-right partners dictate matters in both Gaza and the West Bank Mr Netanyahu is inflicting disaster on the Palestinians now and dooming their hopes of a future state. ■

Negotiations with Iran

Schrödinger’s pact

DUBAI

A showdown over sanctions is the latest crisis between Iran and the West

THE NUCLEAR deal of 2015 between Iran and world powers has been a dead letter for years. America withdrew in 2018. Iran stopped meeting its commitments soon after. Rafael Grossi, the head of the UN’s nuclear watchdog, calls it an “empty shell”. Yet in diplomacy as in quantum physics, life and death can be ambiguous.

On August 28th Britain, France and Germany notified the UN Security Council that Iran was violating its obligations under the deal, known as the Joint Comprehensive Plan of Action (JCPOA). That started a 30-day countdown to bring Iran back into compliance. If the talks fail, a spate of UN sanctions lifted by the JCPOA, including an arms embargo, will be reimposed.

The process, dubbed “snapback”, was a novel device. Once triggered, the sanctions are automatically restored unless the Security Council votes to do otherwise, which prevents Russia and China from wielding their vetoes to block them.

Iran has been in breach for years. The JCPOA allowed it to stockpile no more than 300kg of uranium enriched to 3.67% purity, the level used for nuclear power. In May the UN’s International Atomic Energy Agency (IAEA) said Iran had accumulated 8,413kg of the stuff, almost 409kg of it refined to 60%, a short hop from weapons-grade. Still, the Europeans had been reluctant to invoke snapback, fearing it might

push Iran towards even more belligerence.

The calendar forced their hand. The snapback provision expires on October 18th. Next month Russia assumes the presidency of the Security Council, which might allow it to gum up the works with procedural tricks. Invoking it when they did was the last gasp of a dying agreement.

Now Iran must decide how to respond. Some lawmakers in parliament are pushing for defiance. They have drafted a bill that urges the regime to withdraw from the Nuclear Non-proliferation Treaty (NPT), halt further negotiations with the West and suspend co-operation with the IAEA. The dilemma for Iran is that such steps might provoke a harsh reaction. Withdrawing from the NPT, for example, would be taken as a sign of hostile intent; it risks inviting another round of air strikes from Israel or America, which both bombed Iran’s nuclear facilities in June.

The government could ignore the bill, buying time for talks. “The window of diplomacy is still open,” said Kaja Kallas, the EU’s foreign-policy chief, in a meeting on September 1st with Mr Grossi. Maybe so—but only a crack. Compliance with the old deal would not satisfy Donald Trump, who wants Iran to relinquish its uranium-enrichment programme altogether.

Iran, however, continues to argue that enrichment is a sovereign right. It might compromise on the size of its uranium stockpile, as it did under the JCPOA, but it refuses to dismantle the programme entirely. To avert snapback, in other words, negotiators would have to lay the foundation for a new agreement by the end of the month—a tall order.

That leaves a third option: buy time. Russia has proposed extending the snapback deadline by six months. The Europeans have been willing to discuss the idea, but worry it is a stalling tactic. If the sanctions are reimposed, Iran may wager it can cope. Some of its big trading partners are liable to ignore them, and a chaotic Trump administration may struggle to rally the UN to enforce them. Iran could offer to talk with America about a new deal and with the IAEA about renewed inspections.

The concern is that Iran might use the time to restart its nuclear programme. No one can say for certain how badly it was battered by the strikes this summer. The IAEA has not been allowed to visit the most sensitive sites since the war. Mr Trump continues to claim that they were obliterated. Some of America’s diplomats and spies think this assessment too rosy, but dare not contradict him in public.

The damage was no doubt severe. Without proper inspections, though, Iran’s nuclear programme has entered its own state of quantum uncertainty, making it hard to know when the next moment of crisis will occur. ■



Baghdad

Boomtown

BAGHDAD

Two decades after America's invasion, the Iraqi capital is flourishing at last

CRANES SPROUT above the Baghdad skyline. The shriek of electric saws echoes across the city. Under the heavy summer sun, workers lay a new pavement outside a chic *fromagerie*. Baghdad is enjoying a construction boom. Iraq looks remarkably stable—and that is drawing foreign investors and reshaping its capital.

The government has big plans “to improve services and infrastructure after years of war and instability”, Muhammad al-Sudani, the prime minister, tells *The Economist*. Since taking office in October 2022, his government has built 20 new bridges and overpasses in Baghdad (one, an aide claims, in just 80 days). At least four new hospitals have opened, including Iraq's first dedicated cancer centre and a Korean-designed intensive-care hospital. Over 1,700 schools have been built or rebuilt. Half a dozen posh hotels are set to open. BP has resumed operations and talks are under way with ExxonMobil and Chevron, international oil giants.

Several factors explain the development frenzy. Improved security is helping. By post-2003 standards, Iraq has never been as calm. Reforms in the banking sector have made credit more accessible. Oil and construction revenues that once flowed to Beirut or Geneva are increasingly being spent in Iraq.

Mr Sudani has made it his mission to push public and private projects through Iraq's sluggish bureaucracy. He often behaves less like a politician and more like a foreman, ringing up managers and making unannounced visits to building sites. He oversees powerful investment committees that can swiftly approve projects. “What we used to do in a year or two, they can now do in one sitting,” says Namir al-Akabi, chairman of Amwaj, one of Iraq's largest real-estate firms, which is throwing up apartment blocks across Baghdad.

Progress goes beyond the capital. Mr Sudani has digitised many government services. The passport office in Baghdad issues new travel documents within 45 minutes; officials claim they are the fastest in the world. Until 2023, annual customs income had never exceeded 900bn Iraqi dinars (\$690m). This year it is expected to exceed 3trn dinars. The days of dodging fees by importing containers of iPhones as bananas are over, thanks to digitisation, says one UN official.

Government salaries are no longer paid

in cash. Payments for government services, such as those speedy new passports, can be made only with a bank card. Five years ago almost no one in Iraq had one; today they are essential.

Other changes have proved trickier. Notably Mr Sudani has avoided direct confrontation with the Iranian-backed militias that have allowed the Islamic Republic to control much of Iraq's politics and economy. “I want them to invest. I want them to get busy with prosperity. I want to divert them from violence,” he has said, according to an ally. Many have indeed formed companies and are bidding for government contracts. Iran's proxies in Iraq stayed out of its 12-day war with Israel, perhaps vindicating Mr Sudani. “The cats got too fat to fight,” says one Iraqi observer.

But others argue that Mr Sudani's approach simply gives the militias cover to enrich themselves and tighten their grip on the state. Critics say that the prime minister is merely folding them into the state without holding them accountable. In July fighters from Kataib Hizbullah, a militia with close ties to Iran, raided an office at the ministry of agriculture to protect a director accused of corruption facing dismissal. Mr Sudani promised to bring those responsible to justice. But so far he has not done so. Instead, the incident has shown how free the militias are to act when their interests are threatened.

Few believe Mr Sudani can confront them head on. The failure of Iraqi forces to rescue Elizabeth Tsurkov, a Russian-Israeli researcher kidnapped in Baghdad by Kataib Hizbullah in 2023, highlights the limits of Mr Sudani's power. “I don't know where she is,” he said. “If we knew, we would have gone and brought her back... Give us a point, a location in Iraq, and our security forces will arrest her kidnapers and release her.”

Mr Sudani's record has other holes. He has done little to slim down Iraq's bloated civil service: over 10m Iraqis draw government pay cheques—among the world's highest public-to-private ratios. His efforts to reform Iraq's energy have failed, largely due to resistance from groups linked to the militias. Corruption persists.

Iraq's potential is nonetheless enormous. Its population, around 46m according to a census in 2024, is young and growing by nearly a million each year. There are now 20m more Iraqis than there were before the American invasion.

Elections are due in November. Mr Sudani wants a second term to finish what he has started. But even if Iraqis welcome his reforms, they may not ensure his victory. Many in the Shia Co-ordination Framework, an umbrella group for Iran-backed factions, see Mr Sudani as a threat to their interests. If they unite against him, his progress could prove fleeting. ■

Opioids in Africa

A dangerous high

FREETOWN

New synthetic drugs are wreaking havoc among young Africans

NYEMA SLIPS through the back door of a support centre for young people in Freetown, the capital of Sierra Leone. “I don't want them to search my bag,” the 25-year-old former student explains her reason for avoiding the front entrance. She first discovered the centre when its volunteers offered her pre-exposure prophylaxis to protect her from HIV. But today she is back for help with something else: staying off kush, a potent mix of synthetic opioids and cannabinoids.

Nyema is one of countless youngsters in Sierra Leone and across west Africa who are struggling with addiction to kush. Cheap, highly addictive drugs based on synthetic opioids have swept the region's streets and campuses. Governments have had little success in stemming the epidemic. Combined with the lack of jobs and opportunities in African countries, the drugs' spread threatens the future prospects of many young Africans.

It is not the first drug epidemic to menace west Africa. Sierra Leone has long been a regional gateway for cocaine and heroin. Tramadol, a painkiller used to help with opioid withdrawal, became a popular street drug in the 2010s, shipped mostly through Nigeria but travelling as far inland as Niger. Regulatory changes in 2018 in India, where most of it was sourced, made it more expensive, dampening demand.

Yet kush, which has partly filled the gap ▶▶



Risking it all

▶ left by tramadol, is more dangerous. It is cheap, at just \$0.40 a dose, and extremely addictive. Recent testing by the Global Initiative against Transnational Organised Crime, an NGO, found many varieties contain nitazenes, a relatively new class of synthetic opioids that are also thought to be responsible for an increase in drug deaths in Britain. They can be 25 times more potent than fentanyl, a main culprit of America's opioid epidemic that is itself 50 times more potent than heroin, meaning users need only a small amount to achieve the same effect.

As with fentanyl in America, the psychoactive ingredients are easy to import and cook up in local back-room kitchens. This keeps prices low and makes it harder to crack down on the trade. Components are shipped via courier services from China, Britain and the Netherlands, often disguised as mechanical lubricants or "flavour sprays". They are then dissolved in acetone (sold as nail-polish remover). The liquid is sprayed on marshmallow leaves, which are ground into powder and smoked. Users rarely know exactly what they are taking, increasing the risk of accidental overdoses. In Sierra Leone, dealers are increasing the potency as customers have built up tolerance to "milder" varieties.

The drug is wrecking lives. Like Nyema, many users first try it as students and end up dropping out of school or university. Dr George Eze, a professor at the psychiatric hospital in Freetown, says most kush users he has treated had some education. "The dizziness, the sleepiness, you'll sleep your future away," says Nyema.

Kush use is associated with self-harm and psychosis. The first patient Dr Eze saw for a kush addiction had lacerations down his arm after he smashed it through a television screen, adamant that he saw his girlfriend on it. Kush also aggravates other health risks. Malnutrition from suppressed appetite makes users vulnerable to other diseases. Many end up selling sex to fund their addiction, putting them at increased risk of sexually transmitted infections.

Precise numbers on the toll are hard to come by, but a report by the Clingendael Institute, a Dutch think-tank, estimated in February that kush had killed thousands of people across west Africa. Everyone your correspondent met in Freetown knew at least one addict. The mayor has set up a dedicated burial team to collect the bodies of those who have died on the capital's streets of overdoses or diseases worsened by kush use. Sierra Leone has been holding mass burials and cremations of victims since 2022. The country's only psychiatric hospital is treating many more people for conditions associated with drug use than it did just a few years ago.

Governments are aware of the problem. Sierra Leone and neighbouring Liberia de-

clared a public-health emergency in early 2024 following a steep increase in deaths and hospitalisations related to kush. In Sierra Leone, a new task-force set up by the president and spanning multiple ministries is supposed to tackle the crisis. "We identify drug users, we take them into facilities, go through rehab and then try to reintegrate them," says Foday Sahr, who runs the task-force. The anti-drug agency is stepping up efforts to alert people to the dangers of kush. Mr Sahr claims that the number of drug-related deaths has been declining for the past year as a result of government action. However, he admits that drug use is not going down.

African governments may make some headway by increasing funding for task-forces like Mr Sahr's, improving co-opera-

tion between regional authorities and modernising anti-drug policy, which currently penalises users and those "hanging around" drug dens, but does little to deter dealers and producers. Yet reining in the epidemic would require a global effort to clamp down on supply chains, including closer scrutiny of Chinese exports and tighter controls on synthetic opioids in Europe. Governments also need equipment to test what they are dealing with.

Little of that is forthcoming. For now, countries are left with piecemeal efforts to wean people off kush or at least protect them from the worst consequences of addiction. Withdrawal is difficult and can be fatal. Nyema says she last smoked kush "yesterday" and begins to cry. "It's a part of me now...but I'm reducing it. I'm trying." ■

Building infrastructure

Towering legacies

The new frontier of skyscraper-building

AFRICA IS A low-rise continent. It has just 26 buildings taller than 150 metres, compared with nearly 300 in Dubai alone. Yet 12 of them have sprung up in the past five years alone, suggesting a mini-boom in skyscrapers.

The tallest, Egypt's Iconic Tower, was completed in 2024 and rises nearly 400 metres above the desert outside Cairo, the capital. Soon it will be surpassed by Tour F in Abidjan, the commercial capital of Ivory Coast. At 421 metres, Tour F will tower 300 metres over the city's

next-tallest building. Morocco and Ethiopia are also building towers.

Typically, argues Jason Barr, author of a book on skyscrapers, towers cluster in places where space is tight and growth is high, leading to cities expand upwards. Some of the countries building high, such as Ethiopia and Ivory Coast, are growing rapidly. Africa's sprawling cities could do with densification.

Yet at a time of high debt, tight budgets and dwindling foreign-aid payments, the economic purpose of towers pushed by governments is doubtful. Iconic Tower is part of a new capital championed by President Abdel-Fattah al-Sisi, a project that may set Egypt back \$58bn. Egypt's government, which already spends nearly two-thirds of its budget on servicing its public debt, is borrowing most of the money from China. Bruno Nabagné Koné, Ivory Coast's construction minister, says Tour F will be an efficient home for a large bureaucracy. But at more than \$400m, it is not clear whether it will strain government finances or save money.

More plausibly, tall towers are in part about national prestige. Morocco's Mohammed VI tower is named after the king. Mr Koné boasts that the slick design of Tour F is "appreciated" by Ivorians. Egypt's prime minister says Iconic Tower is a "symbol of modern Egypt". Ordinary people must hope that these grandiose building sprees do not come at the expense of rising living standards.



An expensive vision

Europe



Finland

From Helsinki with love

HELSINKI

What Finland could teach Ukraine about war and peace

THE TYRANT in the Kremlin claimed it as within his sphere of influence, and demanded an unequal land swap. When that was rejected, he staged a false-flag operation and then invaded, expecting to take the capital in two weeks. The Western democracies promised support, but failed to deliver. Less than five years later the victim was forced to cede a tenth of its territory to Russia, and to promise perpetual neutrality. That was the fate not of Ukraine this decade but of Finland in the 1940s. It is now one of the most successful and prosperous of European states.

Finland is back in focus these days. Its president, Alexander Stubb, was included in a meeting last month at the White House between Donald Trump, Volodymyr Zelensky and six other European leaders. When Mr Trump turned to Mr Stubb, one of Ukraine's staunchest and most

cool-headed supporters, he said: "We found a solution in 1944 and I'm sure that we'll be able to find a solution in 2025 to end Russia's war of aggression, find and get a lasting and just peace." And in a recent interview in Helsinki with *The Economist* Mr Stubb said of the 1944 decision, which is seen by many as a defeat, that "We still feel we won, because we retained our independence."

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When Stalin first attacked in the Winter War of 1939-40 Finland had only been independent for 21 years, having spent most of the 19th century as part of the Russian empire, and the 600 years before that as part of Sweden. It was included in the secret Molotov-Ribbentrop pact that carved up central and eastern Europe between Germany and the Soviet Union. Finland was assigned to the latter.

Yet unlike any other part of the former Russian empire, and much of central and eastern Europe as well, Finland, a country today of fewer than 6m people faced with a 1,300km border with Russia, never lost its independence or its democracy. It owed this not to Western support but to the grit of its people, the integrity of its elite and the hard realism of the man who commanded its army through the years of war—Carl Gustaf Mannerheim (pictured), formerly a general in the Russian Imperial Army who was as resolute in putting up the fight as he was in accepting a bitter peace.

In March 1940, after "16 weeks of bloody battle with no rest by day or by night", Mannerheim addressed his soldiers: "Our Army still stands unconquered before an enemy which in spite of terrible losses has grown in numbers." The overwhelming scale of Western support and

▶ the overwhelming size and brutality of an enemy “whose life-philosophy and moral values are different from ours”, meant that although Stalin failed to achieve his maximalist goals, Finland had to forfeit land, but not its people.

“We must be ready to defend our diminished Fatherland with the same resolution and the same fire with which we defended our undivided Fatherland,” Mannerheim said. The entire population of Finnish Karelia—over 400,000 people—was evacuated after the end of the Winter War and the subsequent War of Continuation, in which for a while Finland pushed the Russians back.

Finland’s experience has been cited from the start of the war in Ukraine—both as a model to avoid and one perhaps to bear in mind and even follow. Mannerheim’s speech was circulated in President Volodymyr Zelensky’s office in the first months of the war, but was put to one side.

The peace imposed on Finland in 1944 was hardly just. But it could have been worse. Finland handed over 10% of its territory, including Karelia and half of Lake Ladoga. Its army was restricted, as was its ability to join NATO. It was forced to let Russia lease a naval base on Porkkala, a peninsula in the Gulf of Finland just 30km from the capital. And, because it joined forces with Hitler later in the war, it was forced to pay reparations to the Soviet Union which had attacked it five years earlier.

To much of the world, this was a defeat. To Mr Stubb, whose father was born in the territory annexed by the Soviet Union, and whose summer house stands in Porkkala, back in Finnish hands since the 1950s, it looks different. Lacking any security guarantees from the West or anyone else, Finland exercised this independence not by turning anti-Russian—which would almost certainly have resulted in another invasion—but by building one of the most successful countries in Europe. “People didn’t wait for perfect conditions. They worked with what they had,” Risto Penttila,

a foreign-policy expert, explains.

In politics and in the media Finland carefully avoided anything that could anger Moscow. To most outsiders, what became known as “Finlandisation” was a servile form of appeasement. To Mr Stubb and most of his countrymen, “it was the definition of *realpolitik* at a time when we did not have a choice.” It allowed Finland to stick to its core values: universal education, social welfare and the rule of law.

Long before it joined NATO in 2023 Finland had developed a system of “total defence” that relies on compulsory national service and the voluntary participation of private businesses. Its conscript army generates a reserve force of almost 1m trained citizens. Esko Aho, a prime minister in the

1990s, says none of this would be possible without a sense of fairness. “Finland was able to create national defence not just because of a threat from Russia, but because it had something worth defending.”

Mr Stubb says that Ukraine today is in a better position than Finland was in 1944—“a devastated, dirt-poor country” with almost no support from the outside. Ukraine has allies working on security guarantees and helping it economically. Ukraine, he says, can either dwell in the past and lament the unfairness of the world outside, or “it can pick up the pieces, reconstruct and believe in its own future”; eradicating corruption, fostering freedom and social justice, and killing cynicism. That is the choice that lies ahead. ■

Russia

Here’s looking at you

Vladimir Putin is building a super-app. Russians will not like it

WHEN RUSSIA invaded Ukraine in 2022, the Kremlin swiftly banned Facebook and Instagram; their parent company, Meta, was labelled an extremist organisation. Yet one Meta-owned social-media service—WhatsApp—survived. A court ruled that the app’s focus on private chats, rather than sharing information publicly, meant it could be spared. But it may have simply been too popular to block: WhatsApp says it has more than 100m users in Russia.

Now Vladimir Putin has re-entered the chat. On August 13th Russia’s internet watchdog, Roskomnadzor, said it was restricting calls on WhatsApp and Telegram, claiming it was trying to counter fraud. In fact, Russia’s president is preparing to promote a new domestic alternative. In June he signed a decree ordering the creation of a state-endorsed app that would combine messaging with e-government services. The Kremlin assigned the project to VK, a state-linked social-media group that had already released the beta version of a platform called MAX, which integrates messaging, payment software and the ability to host “mini-apps” for activities such as shopping and food deliveries.

MAX is set to form the basis of the Kremlin’s new endeavour, which will be pre-installed on new devices. Yet the concept clearly stems from Asia’s super-apps, and particularly China’s WeChat. That app is a pillar of daily life in China. Some 1.3bn people use it not just for messaging but also for reading the news,

booking travel, making medical appointments and paying bills. It is also an instrument for censorship and surveillance. It restricts material critical of the Chinese Communist Party, and police use it to snoop on dissidents, too.

Mr Putin no doubt craves such a tool. But the public’s appetite for a Russian WeChat is less certain. More than 36% of Russians already use virtual private networks (VPNs), software that gives access to blocked content by making a device appear as if it is in another country. And there are fears that the new app will allow the authorities to hack into the phone’s microphone or even its camera.



Russia's oil refineries

Incoming

Ukrainian drones have taken a fifth of Russia's refining capacity offline

AS DONALD TRUMP rightly observed on August 22nd, "It is very hard, if not impossible, to win a war without attacking an invader's country." Mr Trump may have earlier this year declared that Ukraine lacks "the cards" to win, but for two years it has been carrying out successful attacks on oil refineries and depots across Russia. And in the past month that campaign has shifted into a higher gear.

Since the beginning of August, Ukraine is believed to have carried out over a dozen strikes on Russia's oil-refining and distribution system, and the tempo shows no signs of flagging. The most recent were on refineries at Krasnodar and at Syzran, a city in the Samara region, on August 30th. Both of those refineries, which have been hit many times, supply fuel to Russian military units, says Robert "Madyar" Brovdi, commander of Ukraine's Unmanned Systems Forces. Ukraine says 40% of its long-range strike targets in 2025 have been Russian refineries. Others have hit storage and pumping infrastructure.

According to some estimates, up to 20% of Russia's refining capacity has been taken out, at least temporarily: a loss of well over 1m barrels a day, mainly of petrol but also of diesel. Refineries that have been hit several times have suffered lasting damage. The destruction of the cracking units that break down crude oil into petrol, diesel and aviation fuel is hurting most, because they are difficult to replace under the sanctions regime.

The impact is being felt with forecourts running dry and queues for petrol across different parts of the vast country. The wholesale price of petrol has risen by 54% since the beginning of the year, and is at a record level. The authorities have suspended gasoline exports. The consequent loss of revenues is adding to Russia's fiscal woes: the deficit for the first seven months of 2025 reached \$61.4bn, already almost 3% of full-year GDP. Petrol rationing has been ordered in some parts of the country.

Sergey Vakulenko of the Carnegie Russia Eurasia Centre, a think-tank, says the refinery attacks in August have been on a different scale to previous campaigns. Mr Vakulenko, who was strategy director of the Russian oil and gas giant Gazprom Neft until his resignation in February 2022 over the invasion of Ukraine, points out that Ukraine can now launch many more drones that are better at navigating and

can attack in massive swarms that overwhelm Russian air defences.

Since the strikes on refineries located in an 800km arc, from Ryazan near Moscow to Volgograd in the south-east, coincided with peak demand for fuel during the holiday and harvesting seasons, Mr Vakulenko reckons they could have a serious impact on the domestic market. "Tens of millions of Russians live to the west of this arc," he says. Fuel shortages have also been reported in places as far apart as Russian-occupied Crimea and Vladivostok in the far east of the country.

What has made this possible is a huge surge in the production of "kamikaze" or suicide drones. Olena Kryzhanivska, an expert on Ukrainian weapons systems, notes that the FP-1 long-range drone, which first appeared in May and now accounts for about 60% of deep strikes into Russian territory, is already being produced at a rate of 100 units a day. It carries a warhead of 60-120kg; with the lighter weight it has a range of up to 1,600km. Though costing only \$55,000 each, the FP-1 is said to have sophisticated software that ensures accurate targeting under intense electronic-warfare conditions. Attacks are also being carried out by the heavier and costlier Lyutyi drones.

Mr Vakulenko reckons that the situation for Russia is "challenging but manageable" for the moment; the sort of full-on fuel crisis that could badly damage the economy and the army is still some way off. However, Sir Lawrence Freedman, a British strategist, warns that Russia will struggle to deal with the impact of the refinery strikes if the campaign continues at its current pace. He concludes: "By itself it will not be decisive, but in combination with a weakening economy and Ukrainian forces holding back Russian advances, it will add to the pressure on Putin." ■



Tourism in Turkey

Wish you were here

MARMARIS

Fires, earthquakes and price hikes are putting visitors off

AS THE SUMMER draws to a close, Turkey's tourism industry is counting the cost. For the fifth year in a row, huge swathes of the country have been incinerated by forest fires. The areas worst affected, along the Mediterranean and Aegean coasts, are also the centre of the holiday business, and this year's blazes are just the latest misfortune to befall it: in 2020, the covid-19 pandemic and the Turkish government's tight travel restrictions saw visitor numbers drop by 90%. This year there have also been hundreds of earthquakes in the Aegean, sparking fears that a really big one is coming. And on top of it all is Turkey's inflation, which stood at 33.5% year on year in July and is robbing the country of its reputation as a budget getaway.

Tourists, both domestic and foreign, are increasingly choosing all-inclusive resorts, which set their prices months in advance and work alongside tour operators on economies of scale, over smaller hotels and self-catering accommodation, which are being squeezed. "Even long-stay visitors who traditionally stayed in self-catering apartments are now opting for all-inclusive resorts," says Sedat Kirt, the deputy mayor of the Aegean district of Marmaris, which relies heavily on tourism.

In this, Turkey has an advantage: the all-inclusive model is the basis of the sun, sea and sand tourism that forms a major part of its travel industry. More than 62m visitors came to Turkey last year, and tourism receipts account for 12% of GDP. But the all-inclusives are bad news for restaurateurs, independent tour guides and shopkeepers, as well as smaller hoteliers who work independently of the large operators and are forced to keep their prices low in order to remain competitive. Though the value of the lira is falling, making the exchange rate attractive on paper, at the checkout desk that is outweighed by inflation. "Prices outside the hotels have increased rapidly," says Mustafa Deliveli, a hotel owner in Marmaris. "I notice that guests are spending more time in the hotel rather than outside."

Even Antalya, the biggest hub for all-inclusive hotels in Turkey and which on its own accounted for more than a quarter of the country's visitor arrivals last year, has felt the decline. Visitor numbers had already dropped by 30% in the first quarter of 2025 compared with the previous year, with foreign arrivals dipping the most. ▶▶

► Meanwhile Turks, who are suffering from a long-running cost-of-living crisis, are taking fewer domestic holidays and in some cases are choosing instead to go to Greece's Aegean Islands, which opened a visa-on-arrival programme last year. When they get there, they find that prices in the euro zone are often cheaper than those at home.

In Marmaris, hotel occupancy rates in June hovered between 60% and 80%, and for the rest of this season hotels will have to depend on last-minute bookings. Mr Kirt also has longer-term worries. If current climate trends continue, the Mediterranean may soon become too hot, not to

mention dangerous for summer travel. Neither do Marmaris and other coastal-resort regions, all of which are controlled by the main opposition party at local level, get sufficient promotional or financial support from the central government, he says. When the region was hit by devastating fires in the summer of 2021, President Recep Tayyip Erdogan provoked fury by casually tossing packets of tea to locals. The municipality is now focusing on out-of-season events to try to bring in year-round tourism, including staging sailing regattas, a seafood festival and even a local version of Bavaria's Oktoberfest. ■

France's government

Bayrou on the brink

PARIS

President Emmanuel Macron looks likely to lose yet another prime minister

THE LAST time France went through five different prime ministers within two years was in the 1950s—nearly three-quarters of a century ago. That was under its chronically unstable Fourth Republic. Now under a different constitution (the Fifth Republic), designed in 1958 to secure stability, the country is on the brink of matching that unhappy record. François Bayrou, the current centrist prime minister, has scheduled a vote of confidence for September 8th over his unpopular deficit-reduction plans. Despite a last-ditch scramble for votes this week, a hostile parliament looks likely to bring his government down, and plunge France into yet more uncertainty. On September 2nd the yield on France's ten-year bonds reached nearly 3.6%, its highest level for 14 years.

Mr Bayrou decided unexpectedly to recall parliament for the vote after opposition parties on the left and hard right threatened to reject his plans to make €44bn (\$51bn) in budget savings in 2026. Given France's high level of public debt (worth 114% of GDP) and the need to curb the budget deficit, which is running at 5.4% of GDP this year, the prime minister was hoping that such parties might at least agree on the need for such savings. Indeed, this narrow question is the one he will put to parliament in a speech before the vote.

But Mr Bayrou runs a minority government, and the National Assembly is split into three hostile blocs. To rescue his job he needs support from either Marine Le Pen's hard-right National Rally (RN) or the Socialists, as well as other abstentions (Jean-Luc Mélenchon's hard left was never going to co-operate). Both parties, however, instantly ruled it out. This week a suc-

cession of party chiefs filed into the prime minister's office for last-minute talks. "No miracle happened," noted Jordan Bardella, the RN party president, after he and Ms Le Pen met Mr Bayrou on September 2nd. They want President Emmanuel Macron to dissolve parliament and call fresh elections. For his part, Olivier Faure, the Socialist leader, this week offered his help forming a new government. He wants a less ambitious budget for 2026, based on only €22bn of net savings.

Either way Mr Bayrou's days look numbered. "He's toast," says one of Mr Macron's deputies. "We're back to square one." With protests and strikes planned on September 10th and 18th, chatter in Paris this

week turned to what happens next. It is unlikely Mr Macron will call fresh elections immediately. The last time he did so, in June 2024, he shrank his own minority group in parliament. If another vote were held today, the RN and its friends would top first-round voting with 33%, according to Ifop, a polling group, well ahead of the four parties of the left, which might garner a combined 25%. Mr Macron's centrists might get a miserable 15%.

Instead the president is expected to appoint yet another prime minister, in an effort to get a budget together for 2026. But the choices are limited. Mr Faure would be no better placed to secure a majority, not least because none other than his own left-wing ally, Mr Mélenchon, this week called the Socialist leader's offer of service "dismaying", and insisted that his party had nothing to do with it. Another prime minister from the centrist group, such as Sébastien Lecornu, the defence minister, or Gérald Darmanin, the justice minister, would face exactly the same difficulty in breaking the parliamentary stalemate.

When it comes to Mr Macron, a surprise can never be ruled out, though not one that would involve himself stepping down. In the face of various calls for his resignation, the president has insisted that he will serve out his full second term, which runs until 2027.

This month he has a busy international diary, including France's plan to recognise a Palestinian state at the UN General Assembly in New York. So if Mr Bayrou falls, as expected, the president will be keen to move fairly swiftly to name a new prime minister—his fifth since January 2024. This would put an end to one element of uncertainty. But it would do almost nothing to solve the political instability that has paralysed France for 15 months. ■



Fun while it lasted

CHARLEMAGNE

Europe's Sputnik Moment

Self-driving cars will mark the moment Europe's decline can no longer be ignored



THE ROND-POINT DE L'ÉTOILE in Paris is where urban planning sets the stage for existential angst. In the shadow of the majestic Arc de Triomphe, hundreds of drivers converge from a dozen directions, swerving across eight lanes of a roundabout stretching half a kilometre round. In the absence of road markings or discernible rules—who needs them, anyway?—drivers trace circles that seem to promise escape only to later confirm the futility of the attempt in a way that might have been staged by Jean-Paul Sartre. Each honk is a reminder that choice cannot be avoided; each swerve, an assertion of will. Hell is other drivers, but giving up is impossible, one must trudge on, *c'est la vie!* Out of this anxious improvisation most cars end up propelled, through an alchemy of will and fate, to roughly where they had intended to go.

If humans barely manage this, how about machines? Cars that drive themselves are becoming commonplace on the streets of ever more cities in America and China. Around a quarter of ride-hailing journeys in San Francisco are now made in cabs with no human at the wheel. Over 2,000 such robotaxis ferry millions of passengers a year in Wuhan, Shanghai and other Chinese cities without incident. The numbers are going up day by day as more cities are included. Yet a technology that is starting to feel humdrum in Guangzhou or Phoenix still seems like science-fiction in Warsaw or Rome. Fully driverless cars are barely being tested in Europe, let alone being made available to paying passengers. Few firms there are anywhere near the front lines of innovation. Will the absence of robotaxis in Europe mark the moment its citizens notice how far the continent has fallen behind?

Europeans are by now well used to being left in the technological dust. From the iPhone to TikTok by way of semiconductors and artificial-intelligence, newfangled products that delight consumers are inevitably imported from China or America these days. This exasperates politicians and investors. In contrast, consumers may not care much. The average European has access to the latest smartphones, ChatGPT models and so on, at more or less the same time as the denizens of the countries that invented them, after all. But driverless cars look as though they could be different: a technology that is not developed in Europe *and* not available to Euro-

peans either, at least not for a while. Idiosyncratic roundabouts are one challenge for the peddlers of robocars. A bigger one is the steady ascent of policymakers in the European Union who fret about the bloc getting hooked on yet more foreign tech.

The reasons why European firms haven't been at the forefront of this latest gizmo race will be depressingly familiar to those who have been tracking the continent's economic plodding. Developing robotaxis to the point where they could be deployed has cost perhaps \$100bn. Most of that has been invested by giant tech groups with multi-trillion dollar valuations like Google; or through venture-capitalists willing to take a punt on a speculative venture (in China the authorities' eagerness for the technology helps loosen purse-strings there). Europe has neither, in part thanks to its fragmented single market. What it does have are large carmakers (one of which, Stellantis, is part-owned by a group that is also a shareholder in *The Economist's* parent company), which also have an interest in driverless cars. But their focus has been on tech that helps human drivers stay in their lane and keep a steady speed rather than outright replacing them. Going fully driverless would risk cannibalising incumbents' sales, as people might hire robotaxis from time to time rather than own their own wheels. In any event, most European carmakers are focusing their research budgets on electric motors to replace internal-combustion engines, the sale of which will be banned in the EU by 2035.

Could Europeans not do with driverless cars what they did with iPhones, ie, simply import the end product that some clever foreign firm has developed? Perhaps. But a mood of technological nativism has enveloped the continent in recent times. On everything from F-35 jets to microchips, policymakers fret that Europe has become too dependent on China and America. Such a protectionist-adjacent agenda was once the purview of the French. It is now far more widespread. Today's European Commission has a vice-president for "technological sovereignty". Silicon Valley behemoths are already tricky for Brussels to regulate, not least when the Trump administration rails against EU rules on free speech or competition. Relying on Chinese tech is, if anything, more angst-inducing. Allowing a sensitive technology—driverless cars double as giant snooping machines, after all—sets many nerves jangling.

Worse, a free-for-all in driverless cars would result in foreign firms profiting at the expense of Europe's incumbent carmakers—huge employers with the lobbying heft to match. As policymakers craft the new rules needed to accommodate robotaxis, the temptation will be to throw a bit of sand in the gears of those Chinese and American leaders, in the hope that Euro-rivals can catch up. Something similarly protectionist is being tried in the case of Chinese electric vehicles, which the EU hit with tariffs in 2024.

At a robo-crossroads

The risk for Europe's politicians is that their citizens will soon realise that they are missing out. Returning from a holiday abroad having seen tech in action that is nowhere near reality at home will be a sobering moment for Europeans. Perhaps that feeling of being left behind will have a galvanising effect. In 1957 the American public clocked that the Soviet Union had pulled ahead in the space race when the first man-made satellite beeped down from the sky. That "Sputnik moment" helped jolt America into action. Europe has fallen further, and more durably, behind both its rivals when it comes to tech. Its coming robotaxi moment would be the right time to get out of the slow lane. ■



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Britain



Reform UK

The Farage power project

Reform UK, on track for government, wants to turn back the constitutional clock

WHY DID DOGE, the bureaucracy-slashing project of Donald Trump's administration, fizzle after 130 chaotic days? The volatility of Elon Musk, its architect and enforcer, was a big factor. Zia Yusuf has another theory, which carries weight because of who he is: Nigel Farage's right-hand man heads "Reform UK DOGE", as Britain's hard-right party terms its own cost-cutting unit. Mr Musk's main obstacle, he says, was the insistence of America's Founding Fathers that Congress controls the federal budget to which Mr Musk sought to take a chainsaw.

And there, Mr Yusuf tells *The Economist*, lies the bull case for Great Britain. Because it has a far weaker separation of powers than America, a prime minister who is elected with a working majority in the House of Commons would have far greater control over domestic policy than a president. A British Musk could cut at will.

That, in a nutshell, is Reform's project

for government: the blitzkrieg on the institutions of Donald Trump, enabled by the weak checks and balances of Britain's unwritten constitution. On Sept 5th-6th Mr Farage will present his plans for a Reform government at a glitzy party conference in Birmingham. This is a plausible prospect. The party leads the national polls, at 31%, according to *The Economist's* poll tracker. A simple calculation based on uniform national swing suggests it would have an almost one-in-two chance of a majority if an

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election were held tomorrow. Its success is fuelled by discontent over immigration and a perception of skewed policing.

But in Mr Yusuf's telling, underlying the anger felt on the streets is a constitutional problem. Britons no longer believe in institutions, he says. They fail to do their job, and when voters demand change they work to sabotage it. Reform's project is a restorationist vision, which promises to turn back the clock several decades to an imagined age in which the checks on executive power were looser, international treaties less binding and in which ministers rather than arm's-length agencies made the decisions. The decentralising government of Sir Tony Blair is, in this tale, the point where things went wrong.

And so in government, Reform would take the orthodox principle of parliamentary sovereignty and use it as a hatchet against perceived constraints on its agenda. Putting Westminster politicians, not unelected technocrats, back on top was the essence of Brexit, Mr Farage's first crusade. In government he seeks to finish the job. "This is the spirit behind our constitution in this country," says Mr Yusuf. "The will of the people must be obeyed, right?"

For all the talk of strengthening Parliament, a Farage premiership would have a presidential streak. Since 1945 the British cabinet has been drawn mostly from elect- ▶▶

▶ ed MPs. That, says Mr Farage, is a recipe for mediocrity and patronage; his would be formed of appointed business leaders and other outsiders, as in America. Since he dominates his party, he does as he likes. The hyperbole is Trumpian too; Mr Farage will be “even more transformative than Thatcher”, reckons Mr Yusuf.

One goal would dominate: the promise to deport some 600,000 illegal migrants in five years, a project termed “Operation Restoring Justice”. The first acts would be to denounce the international treaties that stand in the way, including the Refugee Convention and the European Convention on Human Rights.

Other constraints on executive power would be loosened too. The party values Britain’s independent judiciary, Mr Yusuf says, but all the same its deportation law will be drafted with the intention of precluding judicial review. (Reform’s own draftsmen will do the job in opposition, taking a dim view of the government’s lawyers.) Britain’s senior civil service would be cleared out in favour of apolitical appointees, Mr Yusuf says; a permanent bureaucracy is nice in theory, but one now “totally captured” by ideologues. He expects a titanic clash with the House of Lords. Speed would be of the essence and the party claims it will have stacks of legislation and lists of appointees ready for its first day.

Reform is following a path set by its rivals. The notion that parliamentary sovereignty is a get-out-of-jail card from international treaties was promoted by Conservative governments in their own push to reduce migration. Sir Keir Starmer, the prime minister, also believes the centre of government is too weak and sclerotic, hence his recent appointment of a new “chief secretary to the prime minister” to enforce his writ on September 1st.

But the idea that there was ever a “golden age” in which politicians were unconstrained by the courts or international law is “considerable oversimplification”, says Mark Elliott, an expert on constitutional law at the University of Cambridge. While

the legal checks on the executive have grown, there is nothing novel in the idea that Britain honours its treaties, he says, or that the theoretical capacity of Parliament is tempered by judicial review.

The greatest constraint will come from Reform itself. Mr Farage has a long record of feuds, which in office can be a recipe for paralysis. The party has four MPs. Mr Yusuf stands out in Mr Farage’s beery circuit: a 38-year-old Muslim, who worked at Goldman Sachs and made a fortune founding a luxury travel app, he speaks in the slide-deck terms of “high-agency people”. Many of the actual policies are still vague and poorly costed. But for now, Reform trumpets its inexperience as an asset. “We get this all the time. ‘You don’t know what you’re doing, you’re not the professionals,’” says Richard Tice, Mr Farage’s deputy. “If the professionals and the experienced politicians have been in charge for the last 20 years, how’s that working out?” ■

British shipbuilders

The business of ruling the waves

Britain’s naval dockyards prepare for a shipbuilding boom

NORWAY LAST procured British-built warships in 1899. Assembled on the river Tyne in Newcastle, the two hulking *Eidsvold*-class battleships served as the flagships of the Norwegian fleet for nearly half a century. Now the country is again turning to British dockyards to replenish its navy. On August 31st the Norwegian government announced its biggest (single) defence investment to date: a £10bn (\$13.5bn) contract for five Type 26 submarine-hunting frigates, to be built by BAE Systems at its facilities on the river Clyde in Glasgow. It marks Britain’s highest-value warship export deal ever.

The order is part of a wider boon for the country’s naval shipyards. After decades of atrophy, they are finally again abuzz with the clanging of steel and sizzle of welding sparks. The Royal Navy’s surface fleet alone is expected to grow to 24 frigates and destroyers by the mid-2030s, its most significant expansion in decades. As Britain and other European countries ramp up their defence spending, industry insiders believe this could revitalise the country’s once-mighty shipbuilding industry and usher in a new golden age.

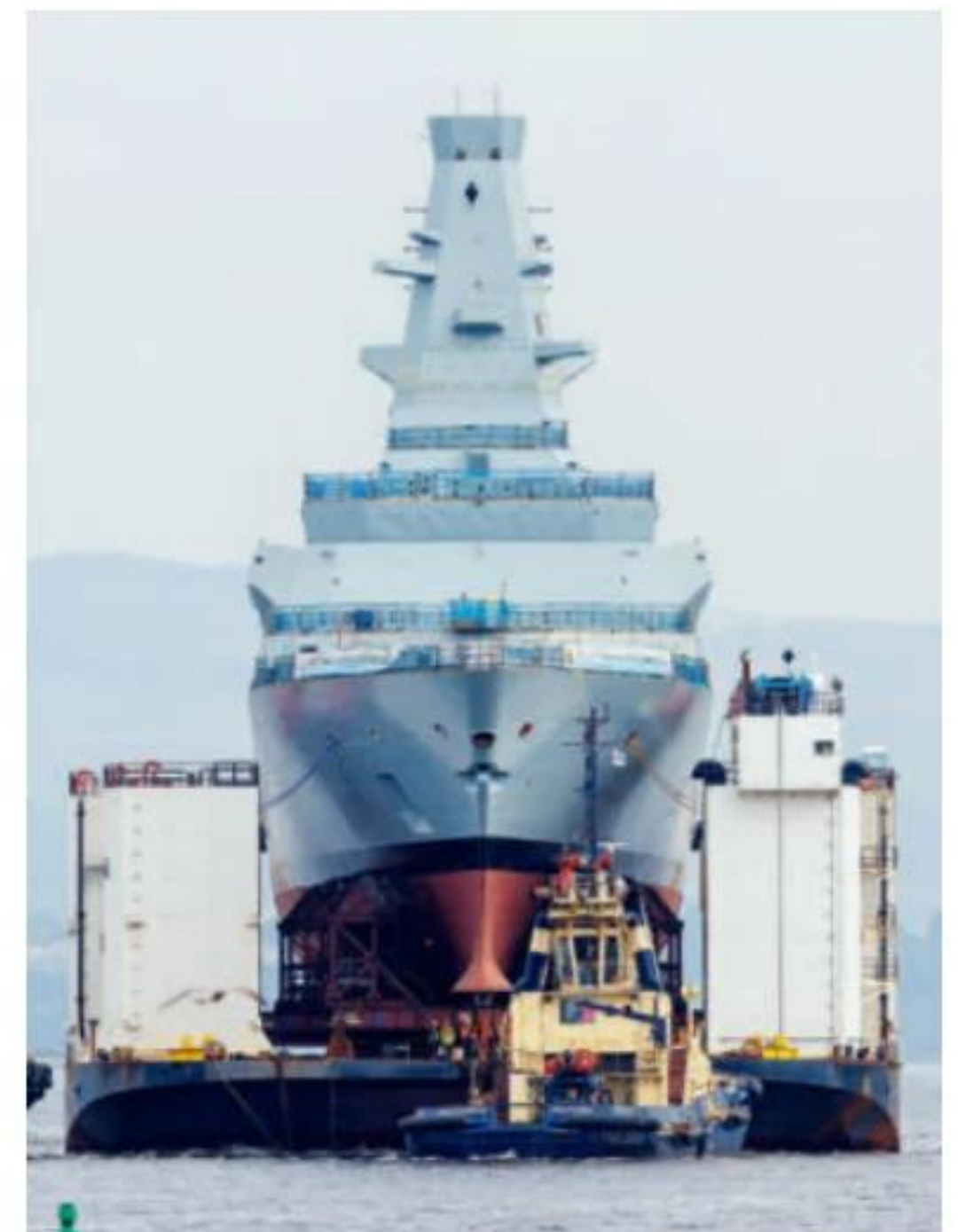
Around 1900, Britain built 60% of all the world’s ships. Today it builds less than 1%. A shrinking empire and navy, and competition from lower-cost Asian shipbuilders, gutted the industry. In an attempt to save

it, shipbuilding was nationalised in 1977, only to be reversed six years later. Today most shipyards have all but abandoned commercial shipbuilding. Instead, the Royal Navy buys the bulk of ships built in Britain. That has left shipbuilders exposed to cycles of boom-and-bust. As the conclusion of the cold war ended demand for big navies, British warship production plummeted. The number of firms making warships dropped from over a dozen in 1960 to just two today: BAE Systems and Babcock.

But the tide has begun to turn. The previous government in 2022 announced a shipbuilding strategy which included an order pipeline of 150 naval and civilian ships spread over 30 years. This should give firms greater clarity and continuity. “Momentum is gathering,” enthuses Sir Simon Lister, the managing director of BAE’s maritime services. “I’m more optimistic than I have been for a long time.”

Amid such bullishness, BAE is investing some £300m in its shipyard at Govan on the River Clyde near Glasgow, where it recently opened the largest shipbuilding hall in the country. After years of programme delays on the Type 26, the company predicts the extra space will cut construction time on each ship by around a third. It is confident about delivering all eight Type 26s frigates for the Royal Navy by 2035. The Norwegian order means it will be building at least one ship a year well into the 2030s. In response BAE is rapidly expanding its workforce, investing £12m in a new welders academy, where it plans to take on some 200 apprentices a year. “The biggest risk to delivery right now is whether we can respond to all of that [demand]”, says Sir Simon.

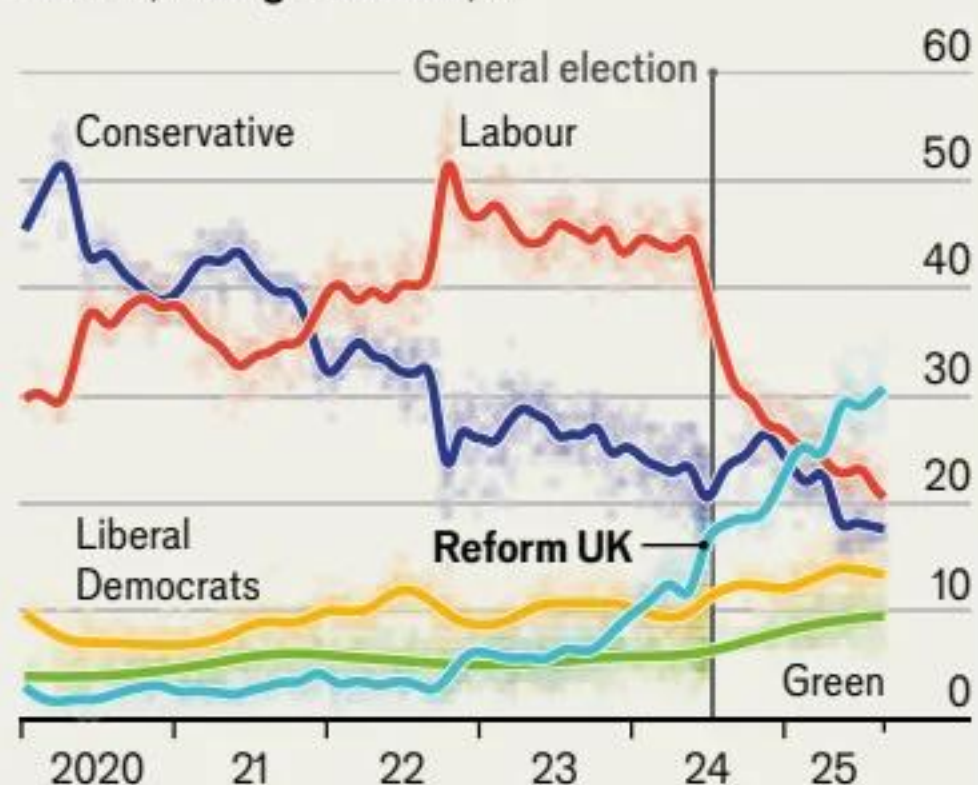
Britain’s shipbuilding prowess is helping bolster the country’s geopolitical clout, too. Take AUKUS, a pact signed by Britain, ▶▶



Sea state smooth

The rise and fall of great powers

Britain, voting intention, %



Source: The Economist’s UK poll tracker

▶ Australia and America in 2021. Under its terms, Britain and Australia will jointly design and build an advanced nuclear-powered submarine, dubbed SSN-AUKUS. Australia plans to build five and Britain 12 such submarines, some of which will patrol the Pacific. In a similar vein, the Type 26 deal with Norway could see the “interchangeable use” of British and Norwegian sailors on joint patrols in the North Atlantic to hunt Russian submarines.

For all the newfound optimism, funding remains a problem. On current spending trends, Britain’s shipbuilding pipeline could face a £5.9bn funding shortfall, warns the National Audit Office, a watchdog. And although the government says it is committed to NATO’s spending target of 3.5% of GDP on defence, it is unlikely to meet that until some point in the 2030s. For shipbuilding to embark truly on a new golden age, the government will need to stump up. ■

Britain’s newest supercomputer

Meet Isambard AI

BRISTOL

How can a middle power compete in AI?

IN A CAR PARK on the outskirts of Bristol in south-west England, security is unusually tight. Anti-crash barriers block the entrance to a fenced compound bristling with cameras and barbed wire. At night two dog units patrol beneath a pair of large black gates. “We call them Jurassic Park gates because they look like there should be a Tyrannosaurus or something behind here,” says Simon McIntosh-Smith, a professor at Bristol University, as the pistons hiss open. Behind them is no dinosaur, “just a supercomputer”.

“Just” is an understatement. The gates cost around £250,000 (\$339,000). Isambard AI, the country’s newest and biggest computer, cost almost a thousand times more (plus millions in running costs). Its black cabinets are filled with blades, each holding copper-plated GPUs cooled by thick red and blue water pipes. Cables twist along the ceiling, hinting that Isambard has more computing muscle than all other British supercomputers combined.

It was, in truth, a panic buy. In 2023 Rishi Sunak, then prime minister, was promoting Britain as a science-and-technology “superpower”. Yet as the world obsessed over ChatGPT, “the UK didn’t really have any AI infrastructure,” admits Professor McIntosh-Smith, director of the Bristol Centre for Supercomputing. In hi-vis jacket and steel-toed boots, he apologises for

the building site he surveys; but for once the mess is testament to a British infrastructure success, not a failure. A supercomputer typically takes four to five years to build. Isambard was commissioned in August 2023; it was switched on in July.

This is far from enough to turn Britain into a computing colossus. Finland, Germany, Italy, Japan and Switzerland all have more powerful resources (Isambard is the world’s 11th-fastest supercomputer). More broadly, Britain is deficient in the resources to match other middle powers in building data centres. The UAE has oil wealth and abundant solar power, and Canada has cheap energy (and land), notes Alex Krasodomski of Chatham House, a think-tank. Britain, by contrast, has some of the most expensive electricity in Europe.

Sir Keir Starmer, Mr Sunak’s successor, has pledged £2bn for AI investment, including £750m for a supercomputer in Edinburgh. That is a rounding error next to the \$320bn America’s biggest tech firms will spend this year alone on AI infrastructure. Perhaps unsurprisingly, the biggest advocate of “sovereign AI” is Jensen Huang, the boss of Nvidia, whose firm supplied the 5,448 chips inside Isambard. In June Mr Huang schmoozed Sir Keir at a London tech event, praising Britain’s AI potential (before moving swiftly on to Paris). Left unsaid was that if the AI race is winner-takes-all, then third place after America and China will yield few prizes.

Even so, Britain has reason to try to stay in the game. “No one knows how [the AI race] plays out,” says Guy Podjarny, founder of Tessl, a startup that uses AI to help software developers write code. The winners could be those with the smartest models—or those building applications on top of them, using the models as a utility. Either way, data and applications will matter, and infrastructure will be needed for

Britain to carve out a niche.

Britain’s best chance lies in nurturing AI talent. It is a world leader in machine-learning research. DeepMind, Google’s AI arm, and Wayve, a promising self-driving-software firm, are already based in London’s King’s Cross. The question, says Matt Clifford, until recently the government’s AI czar, is “How do we make this the best place in the world to try radically ambitious ideas that aren’t in the current paradigm?” One answer is to build hubs like Isambard for “frontier AI” model training. Professor McIntosh-Smith says the machine is already drawing researchers from America, Switzerland and the EU.

Isambard is not big enough to train the largest language models. It will, however, enable other research breakthroughs. Dima Damen’s team at Bristol University helped build the world’s largest dataset captured by wearable cameras. Until Isambard, they lacked the processing power to use it. Professor Damen now hopes to train models that can recognise actions and predict intentions—videos which in future may be able to prompt people with dementia (and also help train home robots).

Around 80% of the 100-plus current projects are in life sciences and health, from skin-cancer detection to drug design. One of Britain’s greatest opportunities, suggests Mr Clifford, could be using AI to reimagine public services like the health-care system. Some projects are eccentric: monitoring cow behaviour to detect early signs of infection, or moth wings to help develop soundproof wallpaper. But the aim behind Isambard is serious. It takes its name from Isambard Kingdom Brunel, a Victorian pioneer who helped engineer the Industrial Revolution by building bridges, railways and tunnels. If Britain wants a stake in the next revolution, it will need more of the infrastructure of the future. ■



BAGEHOT

*The long march of the Resolution Foundation**How to take over a government via PDFs*

SKIP THROUGH the CVs of the recently promoted and appointed in the Labour government and a pattern emerges. Torsten Bell, the boyish pensions minister, now has the unenviable task of helping pull together a painful budget. Before entering Parliament, Mr Bell spent nine years as the chief executive of the Resolution Foundation (RF), a centre-left think-tank. Minouche Shafik, a former deputy governor of the Bank of England, is now Downing Street's economic adviser. She was the co-chair of RF's *The Economy 2030 Inquiry*. Dan Tomlinson, an even more boyish MP and a former economist at RF, is now a Treasury minister. Overseeing this reshuffle? Vidhya Alakeson, the deputy chief of staff in Downing Street and formerly RF's deputy chief executive.

If the fate of Labour's spending plans is now in the hands of RF veterans, its supply-side agenda always was. Matthew Pennycook, the housing minister and another former RF researcher, oversees the party's planning reforms—the keystone of its growth strategy. Even David Willetts, the long-standing president of RF, chairs Labour's "Regulatory Innovation Office", which ensures that red tape does not throttle progress. Judging the economic effect of such reforms is a tricky job, which falls to Richard Hughes, the head of the Office for Budget Responsibility. Luckily, he can call on his experience as a former research associate at RF.

To understand how Britain is run, walk away from Whitehall, turn right at the Houses of Parliament and head to 2 Queen Anne's Gate. This 19th-century townhouse, opposite the pub where Treasury officials mingle post-budget, is home to RF, which since its founding in 2005 has become arguably Britain's most influential economic institution. What began as a think-tank aimed at helping the poor has, somehow, ended up running the country.

Its rise starts with its founder. Sir Clive Cowdery can claim to be one of the most consequential men in politics even if few know who he is, even in Westminster. After a rough childhood, Sir Clive left school with no A-levels before making pots of cash in insurance. He put some of that money towards a PDF mill dedicated to helping those from similar circumstances.

Gaining influence in a G7 economy is cheap. At the start, RF's funding was under a million; even now that it is a much larger op-

eration, its budget remains under £4m (\$5.4m). British think-tanks tend to be pound-shop operations—even grand-sounding outfits can turn out to be three 24-year-olds in a trench coat. Low wages in British think-tanks often mean that someone who chooses to work for one is either a saint, a moron or a zealot.

By contrast, RF has the means to pay good people to produce quality economic analysis. The patient, no-strings funding it enjoys from Sir Clive is a rarity in the sector. Others must pimp out their staff to whoever is willing to pay £80,000 for a 62-page PDF. Lucky RF staff can busy themselves with worthy things, such as pointing out that the Office for National Statistics labour-force-survey numbers are nonsense.

A sliver of political independence meant RF was painted as an objective observer. Lord Willetts, a former Conservative cabinet minister, provides a bipartisan veneer for an organisation staffed by future Labour ministers. The think-tank has always played down the idea that increasing living standards for the less-well-off is inherently left-wing. No one in British politics believes it. Fortunately, BBC commissioning editors do.

It is such an effective ruse that those on the right have dreamed of creating their own version of RF. If one existed, it might have stopped the previous Conservative government relying on RF's ideas. George Osborne, a former Tory chancellor, became a Manchurian Candidate for the soft-left when it came to the minimum wage. In 2015 he cited RF as he set about cranking it to 60% of the median wage—a long-standing aim for the think-tank.

Circumstance played a role in RF's rise, too. Emergencies, such as the covid-19 pandemic, required big fiscal responses that it was happy to flesh out. When the Conservative government was cooking up its response, it turned to a bunch of future Labour ministers. RF's plan for "retention pay" was adopted almost wholesale by Boris Johnson's government in the form of its furlough scheme. When a crisis occurs, argued Milton Friedman, a free-market economist, "The actions that are taken depend on the ideas that are lying around." RF scattered plenty.

Give me redistribution, or give me death

Having spent years shaping British economic policymaking indirectly, the RF gang now have the chance to do it themselves. Mr Bell's works provide as good a guide as any for how Labour will look to raise money. The government has already adopted RF-approved schemes, such as levying inheritance tax on pension pots. Raising a few billion here while smoothing out a distortion there is the dream. But Britain's fiscal position is more of a nightmare. Yields on gilts wobble higher; commentators predict a doom loop of implausible fiscal policy leading to higher debt costs, making fiscal policy even more implausible.

And so Mr Bell and friends face ugly choices. Spending restraint is necessary. But since poor people rely more on the state, this will hit those at the bottom. If the state wants to raise real money, it will have to look at broad tax rises that wallop the not-so-well-off, as well as the rich. The Conservatives (of all people) left behind an over-progressive tax system, in which high-earners are overtaxed and those on middle incomes probably pay too little. In the 2010s RF could point out the follies of Tory austerity in a low-rate world; in 2025 its alumni have to govern in a high-rate one, where the Labour government has to cobble together its own version of austerity, with higher taxes and lower spending. In office, RF may have to hurt the people it once sought to protect. ■

International



Up in arms

The world's hottest upstart weapons dealers

A ferocious global arms race is big business for South Korea and Turkey

THE GATE OF HEAVENLY PEACE in Beijing was anything but tranquil on September 3rd, when Xi Jinping, Kim Jong Un, Vladimir Putin and others gathered to celebrate the end of the second world war. Chinese troops marched in a parade designed to boost national pride and flex military muscles. Perhaps most important, the parade showcased China's newest war-fighting equipment to potential adversaries, such as the DF-61 intercontinental ballistic missile. It also showed off new kit to potential buyers, including a high-powered laser for shooting down aircraft, as well as drones and anti-ship missiles, both supersonic and hypersonic.

The display of China's defence-industrial might comes as the world's military planners are splurging on new weapons. The war in Ukraine, threats of abandonment by America and worries that China might invade Taiwan have Western countries scrambling to fill stockpiles, harden

supply chains and secure flows of munitions. There is a voracious appetite for tanks, artillery, fighter jets, drones and ships. On August 31st Britain announced a £10bn (\$13.5bn) deal to supply Norway with five anti-submarine frigates, the country's biggest shipbuilding order in decades (see Britain section).

Yet not all orders are going to traditional arms exporters in America, western Europe and Russia. Instead, two ambitious middle powers, South Korea and Turkey, are racing to expand their arms industries to capitalise on the boom.

The arms race reflects a larger realignment. Europe is rearming to meet the growing threat of Russian aggression and

to fill gaps exposed by its worries over America's declining commitment to the transatlantic alliance. Yet Europe's arms companies need time to restore capacity lost after the end of the cold war and to rebuild inventories depleted by donations to Ukraine. Meanwhile, the order books of America's big defence firms have filled up at speed as its armed forces replace their own stockpiles of missiles expended in the Red Sea and Israel, or donated to Ukraine.

Russia, usually the second-biggest arms exporter after America, is prioritising its own army after losing vast reserves of equipment in its war on Ukraine, including tanks stockpiled since the collapse of the Soviet Union. Western sanctions prevent its firms from getting components critical to building advanced systems such as fighter jets. Last year, Russian exports were down by nearly 50% from 2022. Clients such as India, Vietnam and Egypt are looking elsewhere, not least because Israel seemed to have little difficulty in knocking out Russian air defences in Iran.

Many buyers are turning to South Korea (see chart one on next page). America is the biggest exporter of arms to European NATO members, with South Korea and France tied in second place. South Korea has more orders from around the world than America does for tanks and artillery. It is third behind America and France for

→ ALSO IN THIS SECTION

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52 The Telegram: China's AI model



► combat aircraft. Last year South Korea sold \$3.2bn-worth of Cheongung-II surface-to-air missile systems to Saudi Arabia, warships to Peru worth \$460m and \$1bn of self-propelled howitzers to Romania.

Largest of all is the deal South Korea signed with Poland in 2022, now worth \$22bn, to sell a range of weapons systems partly built in Poland. That includes 180 K2 Black Panther tanks, 672 howitzers, 48 FA-50 fighters and 288 K239 rocket launchers. Poland wants to deter Russia, and quickly. For South Korea it is a bold signal that it is ready to join the front rank of arms exporters, opening the door to other lucrative deals in Europe.

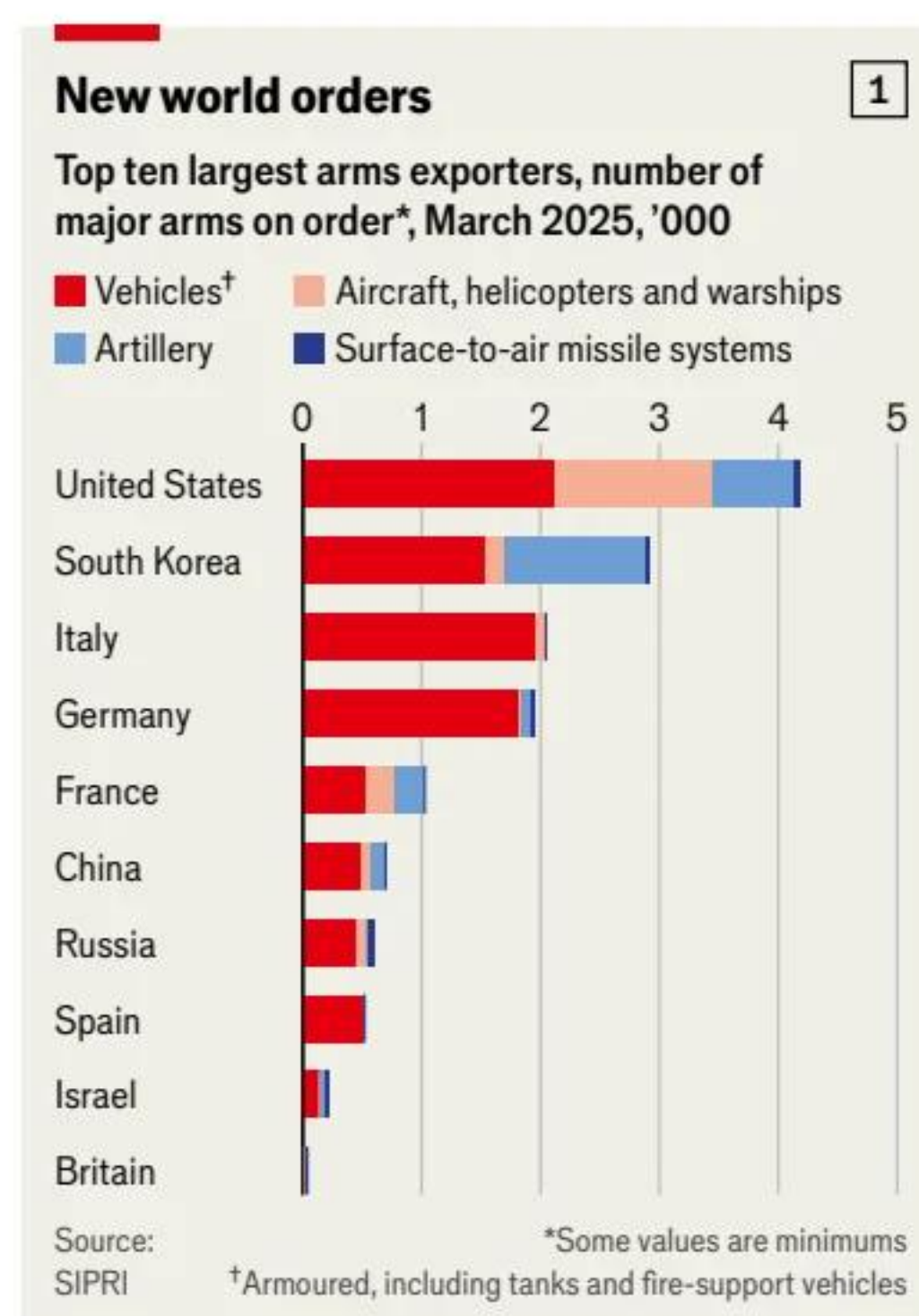
South Korea can rapidly churn out NATO-standard gear at good prices. Seven giant firms work with the government to land orders and co-ordinate research and development. Maintaining capacity has been a priority, in part because the country is technically still at war with its northern neighbour, says Chung Min Lee of the Carnegie Endowment for International Peace, a think-tank. In shipbuilding, Korean firms have a big advantage. They may win a \$17bn contract to build 12 KSS-III submarines for Canada, and the lack of shipbuilding capacity in America could see it scoop up orders from the US Navy.

Its most ambitious programme is the KF-21 fighter, which is expected to enter service late next year, and has won interest in eastern Europe, the Gulf and South Asia. Currently a 4.5-generation aircraft, it is hoped that its next update will make it a full fifth-generation stealth fighter equipped with indigenously manufactured engines. It will test whether South Korea can compete with the most advanced American platforms, such as the F-35, says Kyung-joo Jeon of the Korean Institute for Defence Analysis. Not even Japan or Israel have managed that.

Military-industrial capex

Another up-and-comer is Turkey. Over the past five years, its arms exports have shot up, from nearly \$2bn to over \$7bn last year (see chart two). That is a result of efforts to achieve strategic autonomy, pushed in part by a civilian-run Defence Industry Agency, says Arda Mevlutoglu, a defence expert. Drones made by Baykar outcompete Chinese models. More than 500 of its TB2 fixed-wing models have been sold to over 30 countries. Saudi Arabia has a \$3bn deal to co-produce a more advanced drone called Acinki. Baykar has a joint venture with Leonardo, an Italian defence firm, which is eyeing the stealthy Kizilelma fighter drone as a “loyal wingman” to fly alongside the planned sixth-generation GCAP future fighter jets that will be built by Britain, Italy and Japan.

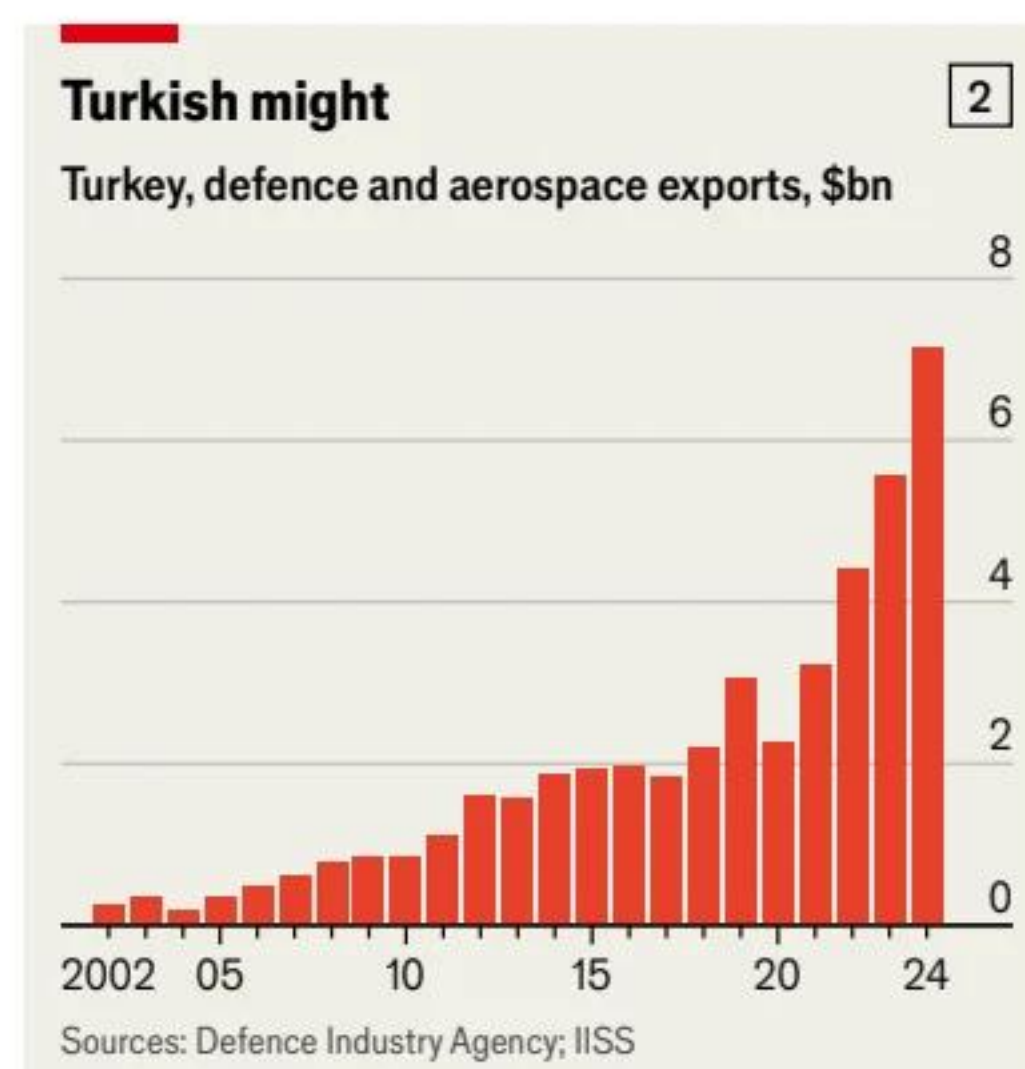
Turkey's president, Recep Tayyip Erdogan, likes the diplomatic influence that



comes with arms sales to Africa and the Middle East. But Turkish firms are looking to European countries with their big budgets. In the past, a barrier to sales has been Turkey's poor human-rights record and its semi-detached status in NATO. However, Serhat Guvenc, an expert in international relations at Kadir Has University, says the new security environment means that European concerns over human rights are a luxury they can no longer afford.

Turkish weapons are battle-proven through its conflict with the Kurds and its interventions in Syria and Libya. They are built to NATO standards and affordable, and have a no-strings-attached sales policy. The breadth of Turkey's range is striking, including armoured vehicles such as the K2-based Altay tank, artillery, missiles, air-defence systems, radars, warships such as the MILGEM family of frigates and destroyers, the Hurjet light attack/trainer aircraft, the ATAK helicopter, armed drones and electronic-warfare systems.

Earlier this year Turkey and Spain agreed to a \$1.6bn co-production deal for



up to 30 Hurjets. Turkey is selling 1,059 Otokar Cobra-II armoured vehicles to Romania in a deal worth approximately \$930m, and last December Portugal signed a \$134m contract for naval-replenishment ships. Last year Turkey, which has developed missiles, was invited by Germany to join the European Sky Shield Initiative, a European plan to jointly procure air-defence and missile-defence systems for which Israel is also an important supplier (see next article). There is every chance that Turkey can go from about 11th in the league table of arms exporters to fifth, says Mr Mevlutoglu.

Turkey is also trying its hand at building more advanced weapons systems. Like South Korea, Turkey has an impressive fifth-generation fighter programme, the TAI Kaan fighter. Although its design is not yet as close to being completed as the KF-21's, it is if anything even more technically ambitious. As well as replacing Turkish Air Force F-16s, it will be competing for export orders as a low-cost F-35 alternative, with potential interest from Indonesia, Azerbaijan, Saudi Arabia and Pakistan—countries with close ties to Turkey.

The battle ahead for market share

Despite their success in attracting new customers, there are challenges. Soon after Russia's invasion of Ukraine, the then president of South Korea boasted that by 2027 his country would become the fourth-largest arms exporter in the world, with 5% of the market. That looks like a stretch. In 2022 its sales nudged \$17.3bn but in 2024 they fell to just \$9.5bn. This year it expects exports of around \$23bn.

As countries continue to pour money into their domestic defence industries, competition is set to get more intense. There are already early signs of a “brain drain” of skilled Korean and Turkish engineers to Western firms with better pay. Successful defence industries generally benefit from generous spending on research and development (R&D).

The arms market is becoming more crowded. Even so the cash-strapped governments of upstart arms suppliers may be reluctant to fund defence projects with the primary aim of winning exports as a form of industrial policy. Mr Lee reckons that South Korea must raise the share of R&D in the defence budget from 17-18% to 20-23% to remain competitive. And access to advanced technologies is still a consideration: production of Korean-made fighter jets on order from Poland has stalled because America has yet to authorise the export of some components. Turkey is still excluded from major Western joint projects, such as the F-35. Even Russia may get back in the game. Still, the escalating global arms race offers plenty of opportunity for new contenders. ■

Flexing their arms (2)

Arrow and shield

JERUSALEM

Israel's arms companies defend the country from not just missiles, but from sanctions too

FOR DECADES Israel's arms industry was primarily known for one piece of kit. The Uzi, a compact and rugged sub-machinegun much beloved by action-movie heroes, embodied Israel's national brand as a tiny, ingenious and, when necessary, deadly little country. Israel has changed since, but its arms industry still has branding power. Nowadays, though, its most ubiquitous product is not a gun but its missile-defence system widely known as Iron Dome (though this is the name of just the lowest of its layered defences).

These systems have also become a major source of income for its defence contractors, contributing to what was a record-breaking year of \$14.8bn of arms export deals in 2024. This puts Israel, a country of only 10m, in the eighth place of the world's arms-exporters' league, just one spot behind Britain and well ahead of the other rising stars of weapons sales, South Korea and Turkey (see preceding article).

Israeli figures don't disclose the total sales to each country, but according to its defence ministry, over half were to Europe. In 2023 Israel signed a \$4.3bn contract to supply Germany with Arrow 3 interceptor batteries, which down incoming ballistic missiles while they are still outside the atmosphere. In May Germany announced it would also buy the more advanced Arrow 4. In addition, Israel has sold drones, missiles and air-defence computers to Britain, and it supplies targeting systems for jet fighters used by a large number of European (and other) countries.

Israel's arms exports offer the country far more than just commercial benefits. They also help shield it from arms embargoes or other penalties over its conduct of the war in Gaza. "These deals tie countries into a long-term relationship with Israel which helps curb moves towards sanctions against Israel," says an Israeli diplomat. "These countries are invested in Israel for their national security."

This matters because the arms trade is a two-way street. Israel buys many components or systems from its biggest clients, including spare parts for F-35 fighters from Britain and German engines for its Merkava tanks. Although Britain and Germany have announced limits on arms sales to Israel to protest against its devastation of Gaza, their controls are currently more bark than bite. "This is mainly symbolic," says an Israeli official. "We can find worka-

rounds for most of the stuff we were planning to buy from these countries."

Israel's main competitive advantage is that its weapons are battle-tested and in production. This makes them appealing even to much bigger countries such as America, which recently fired an Israeli Spike NLOS missile from an Apache attack helicopters. The M1 Abrams tanks of four American brigades have been retrofitted with Israeli "Trophy" systems, which protect them from missiles and drones. Both systems have been in use by the Israelis for years against Hizbullah in Lebanon and Hamas in Gaza.

When France's president, Emmanuel Macron, sniffily accused the Germans of promoting a "third-party industry at the expense of European sovereignty" for buying an Israeli missile-defence system rather than one that France is developing with Italy, German officials simply shrugged. Russian ballistic missiles pose an immediate threat, they say, and Israel was able to offer a proven system, while the French one is still on the drawing board.

The grand prize Israeli firms are eyeing is in America, where Donald Trump plans to spend billions on the Golden Dome missile-defence programme. He insists that this will be developed and built by American firms, but they are expected to take the obvious shortcut of using Israeli know-how. "American companies will be

standing in line for strategic partnerships," says Boaz Levy, the boss of Israel Aerospace Industries (IAI), which makes the Arrow system.

The strategy of selling through partnerships was once controversial. Twenty years ago, when Israel and India began developing an air-defence missile together, Israel's national-security council held long discussions on whether the country could share its military technology in such a way. Now the Barak system is operated by both countries. In recent months it was used by Israel to intercept Iranian drones and by India against Pakistani missiles. It has recently been ordered by three NATO navies. "The big Israeli exporters nowadays have their own companies in most NATO members," says an industry insider.

This also helps them sell Israeli systems "beneath the radar" in periods when the political climate is less friendly towards Israel. Italy recently announced it was buying two new spy-planes from an American contractor, obscuring the fact they had been developed by Israel, which supplies the main avionics.

Even so, Israeli firms have been unable to completely insulate themselves from international disapproval over the war in Gaza. Britain recently barred Israeli officials from taking part in its biggest arms fair, which starts on September 9th, though individual Israeli companies will still be presenting. In June the French government ordered the erection of black screens around the Israeli stands at the Paris Air Show.

"The French say it's because of Gaza," says one Israeli executive, "but their main problem is that we're competing for contracts with French arms companies and winning." Even Mr Macron's presidential jet, he adds slyly, uses an Israeli system to protect it from anti-aircraft missiles. ■

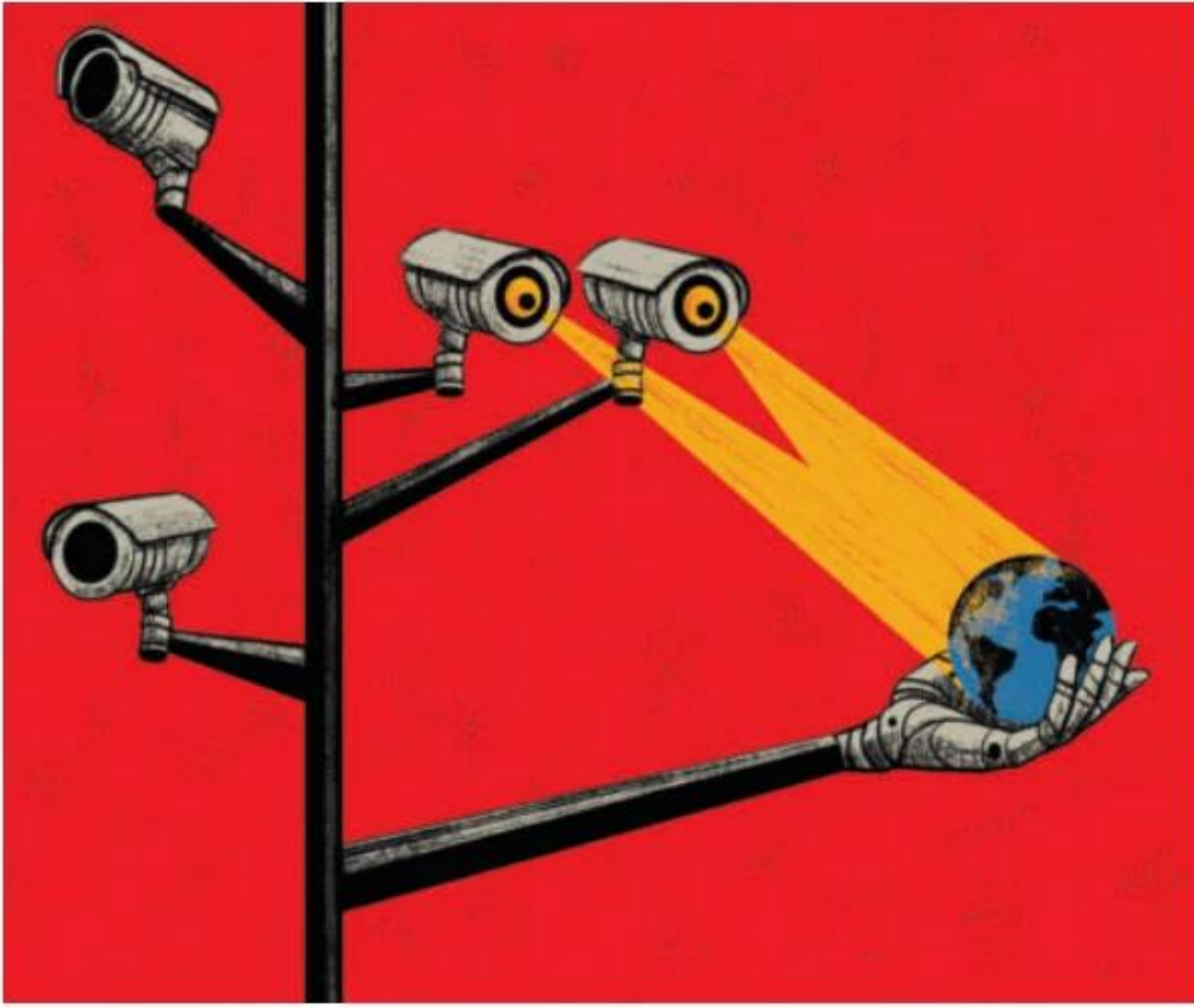


Arrows into the void

THE TELEGRAM

China makes its AI move

China offers the world a values-free, results-based vision of AI governance



IN 1995, DURING a golden age for globalisation, a business professor from Berkeley coined a cheering term: “the California effect”. When companies in wealthy markets face new competition from foreign rivals, argued David Vogel in his book “Trading Up: Consumer and Environmental Regulation in a Global Economy”, they do not invariably lower standards, as gloomsters might predict. Instead, strict rules in a competitive market can trigger a race to the top, including in neighbouring jurisdictions. A case in point involves strict engine-emissions standards imposed by the state of California, America’s most important car market. Rather than make different engines for different states, to take advantage of those with looser regulations, many firms chose to make all their cars to comply with Californian standards.

In 2012 Anu Bradford of Columbia University coined what she called “the Brussels effect”. This was her tribute to the rule-making superpowers of the European Union, a vast consumer market stitched together by rules written in Brussels. Multinational firms might chafe at fussy EU regulations, or rage when fined by Eurocrats. But time and again, they adopted EU standards worldwide.

Today the global governance of trade is not enjoying a golden age. Still, the largest economies—America, China and the EU—retain a keen interest in setting global standards. And for rule-writers in 2025, shaping AI governance is the greatest prize of all. Until this year few would have bet on a Chinese victory in that contest, or the emergence of a “Beijing effect”. For many countries, the Communist Party’s record of internet regulation set a forbidding precedent. Early glimpses of AI regulation with Chinese characteristics were not encouraging. Authorities swiftly banned ChatGPT, an American generative-AI chatbot. The party is especially sensitive about apps that recommend content. In 2023 officials required generative-AI services that can shape public opinion to undergo a security assessment and register their algorithms.

China’s reputation for innovation was boosted in January, with the release of DeepSeek-R1, an advanced large-language model produced with a fraction of the computing power and financial support needed by American rivals. The “DeepSeek moment” cast into doubt American government strategies to maintain a lead in

AI by denying China access to advanced semiconductors. But technical success faces political obstacles. Italy banned DeepSeek over data-privacy concerns and Taiwan barred DeepSeek from government systems, citing security fears.

For all that, China’s AI investors and officials are upbeat. The state is pouring resources into a drive to produce applications that are cheap, accessible and “good enough”. With the help of cheap electricity and a domestic propaganda barrage about AI’s benefits, the party wants the technology to be used as quickly and widely as possible. Being content to come a close second to America is seen as a smart commercial bet. It is also an approach likely to resonate with many countries. The contrast with America is stark, where some in Congress compare the race for AI supremacy to the quest to split the atom. In February Vice-President J.D. Vance scolded Europeans for overcautious regulation, declaring: “The AI future is not going to be won by hand-wringing about safety.”

Others seem to share China’s apparent hunch that AI is a general-purpose technology of huge but not apocalyptic significance: something more like electricity or computers than the atom bomb. In July Singapore’s prime minister, Lawrence Wong, reminded an audience of businesspeople that after the electric dynamo was invented, it took decades to find industrial uses for it. “We get very enamoured with countries that are the leaders of the cutting-edge, frontier technology,” said Mr Wong. “But in fact, the big advantage of technology is when there is broad-based adoption.”

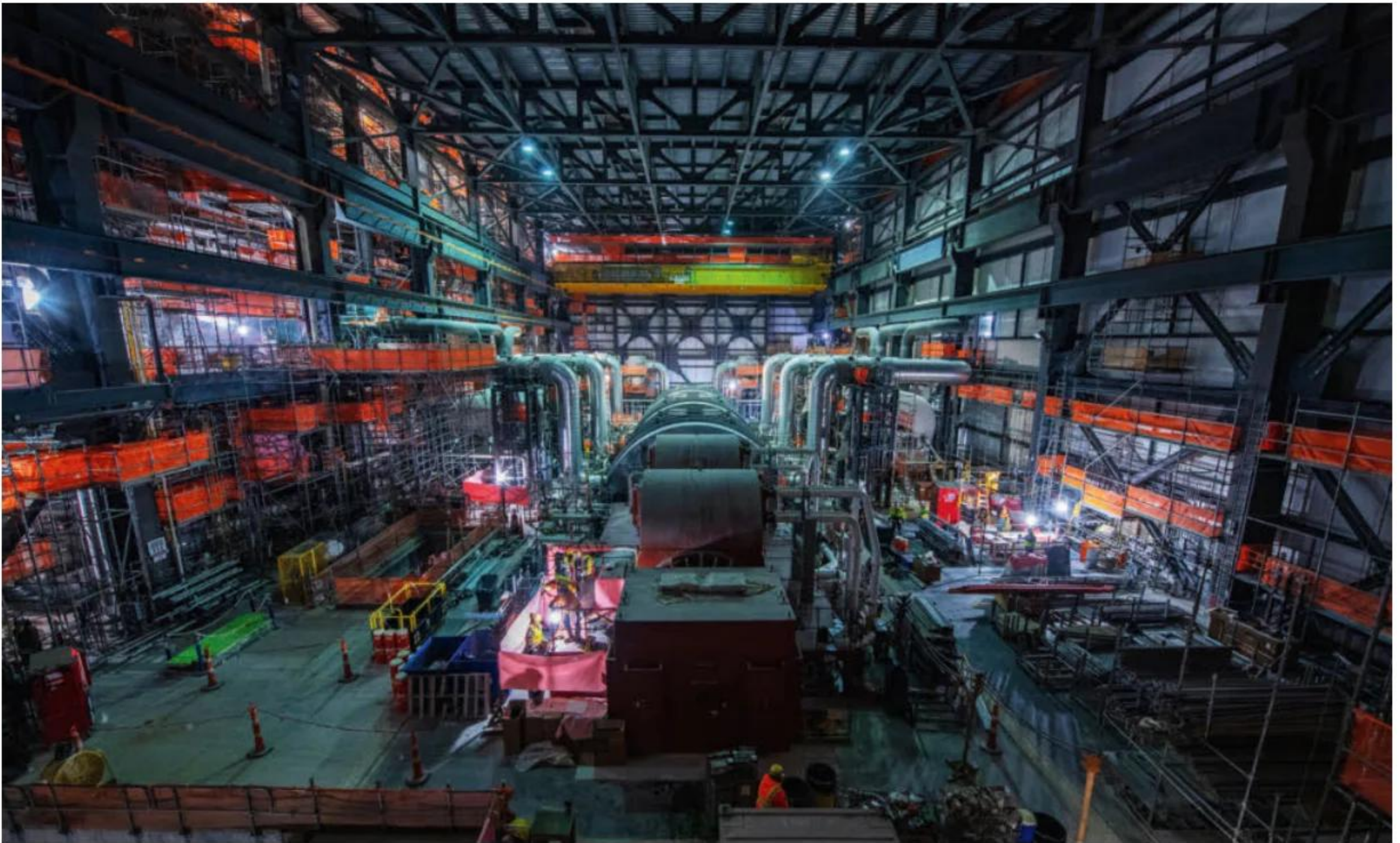
What is more, China’s regulation is more pragmatic and industry-friendly than outsiders suppose, argues a paper by Angela Huyue Zhang, a law professor at the University of Southern California. “The Promise and Perils of China’s Regulation of Artificial Intelligence”, published last year, catalogues how strict controls on information co-exist with lax enforcement of rules on privacy, copyright or data protection. Thus, China’s AI facial-recognition systems are world-class because officials share reams of government data with private firms. Judges boast publicly of making rulings intended to accelerate China’s AI development.

Social control? There’s an app for that

If a “Beijing effect” ever catches on, it is unlikely to trigger a race to the top. China’s approach puts profitability, convenience and social order ahead of individual rights. A European Commission white paper on AI from 2020 frets about the risks of discrimination by algorithm. It cites facial-recognition systems that are less accurate when scanning dark skin, and algorithms that betray racial bias, for instance when predicting whether a known offender will commit another crime. In China, racial discrimination is a business model. Companies have been caught registering patents for systems to spot Uyghurs and other ethnic minorities long subjected to intrusive human surveillance by Chinese police. The EU white paper worries about employers using AI to track workers’ behaviour. In China, that is a flourishing industry.

China’s version of AI governance faces obstacles in liberal democracies, then. But plenty of other countries are in the market for cheap technologies judged by their performance. China has one more advantage. It is competing with a Trump administration openly bent on AI dominance, and on using that monopoly power to impose its ideological preferences. Mr Trump recently threatened punitive tariffs on foreign countries that seek to regulate American tech firms in ways that he dislikes. Once again, America is handing a political gift to China. Call that the “Trump effect”. ■

Business



Energy

Darkness before dawn?

AMARILLO, TEXAS

The nuclear industry faces brutal obstacles. But rarely has it been so optimistic

“**M**AKE AMERICA nuclear again.” That is the aim of Rick Perry, a former governor of Texas who served as energy secretary in Donald Trump’s first term as president. On July 4th, to back up the sloganeering, he launched Fermi America, a firm hoping to build the world’s largest energy and data-centre complex. Outside Amarillo, a cattle town in the Texan panhandle, bulldozers shift red soil for a facility that will first generate electricity using natural gas and solar, before construction of conventional nuclear reactors and several small modular reactors (SMRs), which will produce 11 gigawatts (GW) of power.

The past 20 years have not been happy ones for nuclear energy. Although such power is a significant part of the energy mix in some countries (see chart 1 on next page), no plant has been built on time and on budget in Europe or North America over the period. As the costs of renewables have tumbled, already expensive nuclear

projects in America, Britain and Finland have suffered from delays and vast cost overruns. But on August 25th, in the latest sign of nuclear enthusiasm, Fermi and Westinghouse, a nuclear-tech firm, unveiled a partnership that will seek approval to build four of the latter’s large AP1000 reactors in Amarillo. Is a long nuclear winter showing the first shoots of spring?

Growing nuclear optimism reflects three developments. First, governments in many Western countries increasingly de-

sire a secure and independent source of electricity. Second, big tech’s thirst for reliable power and concern for emissions has brought aboard a rich green uncle. Third, novel operational and financial models may improve nuclear’s risky economics. “Something is different this time,” insists Sama Bilbao y Leon, head of the World Nuclear Association, an industry body.

Nowhere is the change of attitude more apparent than in America. Mr Trump is calling for a quadrupling of domestic capacity to 400GW by 2050. Although that target is unrealistically ambitious, it has mobilised the political system. The One Big Beautiful Bill Act, passed in July, showers tax credits on the industry. Republican states such as Texas are rolling out a welcome mat. So, too, are some blue states. Officials in New York, which shut a big nuclear plant in 2021, now want the state-owned utility to build a new one.

Across the Atlantic, the European Commission unveiled a roadmap in June forecasting that nuclear capacity would rise from 100GW to up to 145GW by 2050. Germany has scrapped its opposition to classifying nuclear energy as “green” in European legislation, making it easier for France to build six new plants. In July Britain’s government made the final decision to proceed with Sizewell C, two giant reactors that could cost over £38bn (\$51bn). ▶▶

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55 Bitter times for Lululemon

55 Google’s antitrust reprieve

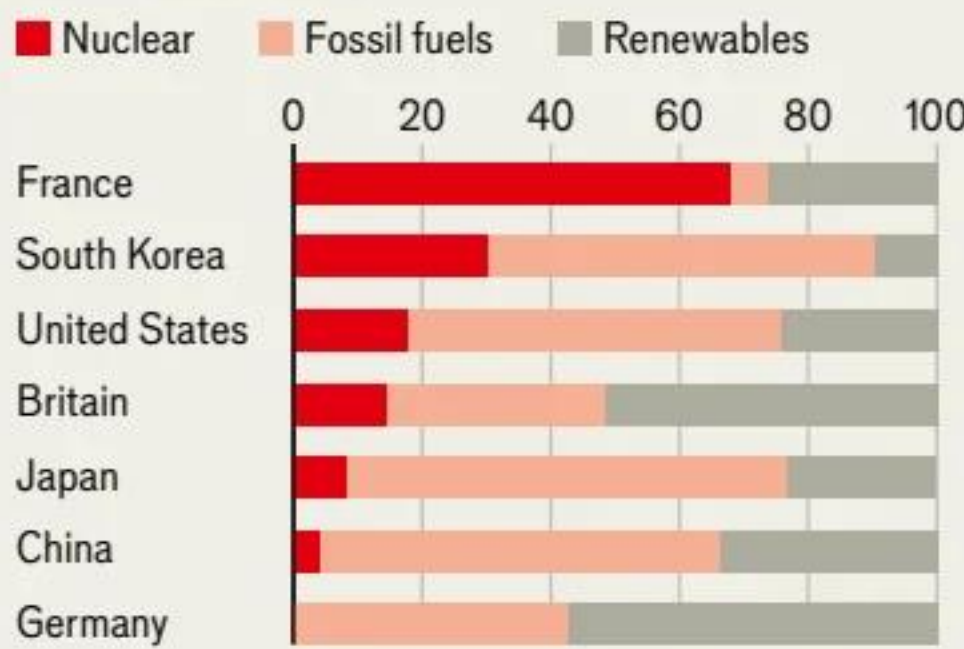
56 Morocco’s investment boom

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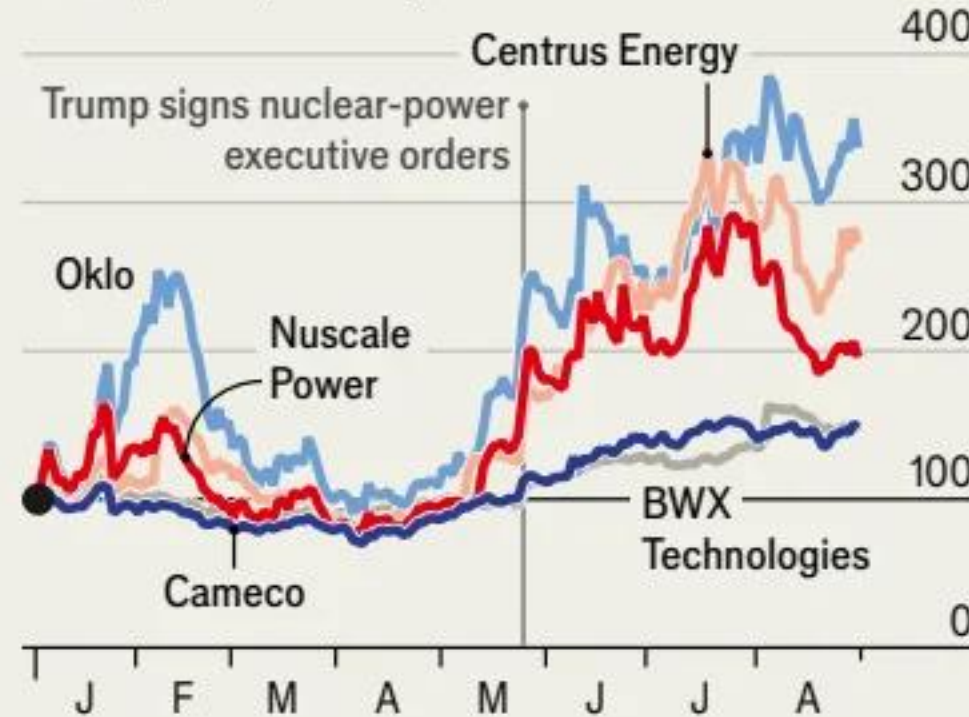
Atomic mass

Electricity generation by source, 2024, % Selected countries



Sources: Energy Institute; Our World in Data; LSEG Workspace

Share prices, January 2nd 2025=100



▶ Meanwhile, Sweden recently confirmed plans to build several SMRs, tiny generators that can be churned out by factories and then transported to suitable sites. Although the technology is not yet commercially viable, the promise of smaller capital outlays than for big reactors, as well as faster scaling, is tantalising. It has convinced over 120 firms to attempt to develop SMRs. Barclays, a bank, predicts that between 2030 and 2050, net nuclear capacity outside China and Russia will probably increase by more than half, to over 450GW, with SMRs accounting for 40-60% of the total, suggesting a \$1trn market. Dozens of startups are also pursuing nuclear fusion, a far riskier endeavour that holds out the possibility of near limitless clean energy.

Big Ambitions

Tech giants are funding both types of technology. SMR startups have raised more than \$2bn since early 2024. In June Oklo, backed by Sam Altman, the boss of OpenAI, raised \$460m and TerraPower, founded by Bill Gates, raised \$650m. Google has signed a deal to help Kairos Power develop a fleet of SMRs by 2035. Fusion startups are attracting big sums, too. Commonwealth Fusion Systems, which is also backed by Mr Gates, unveiled \$863m in fresh funding on August 26th. All told, fusion startups raised \$2.6bn in the year to July.

Michael Terrell of Google says his industry needs “clean, firm power” from nuclear to complement renewables. He argues it is supporting nuclear “short to middle to long”. Near-term, he reckons, life extensions, restarts and “upratings” will have the most impact. Big plants using proven designs and SMRs could come next. Then, only in the long run, might fusion arrive.

The Clinton Power Station in Illinois run by Constellation Energy, the world’s largest private operator of nuclear plants, shows the impact big tech might have. It was made unprofitable by cheap shale gas and was due to be retired in 2027 when state subsidies ran out. Instead Meta, which owns Facebook, signed a 20-year

deal in June to fund a life extension in return for the carbon credits that come with nuclear generation. Last year Microsoft signed a similar deal to restart a retired reactor at Three Mile Island in Pennsylvania.

The Clinton plant holds another lesson. Constellation is investing in equipment, software and processes to expand output. Mr Dominguez reckons 7-10GW could be added to America’s fleet through such incremental improvements. All told, he reckons that big tech’s support will enable 30GW of power to be made available to the market that would not otherwise.

But it is not just big tech pouring money into the industry. Nuclear developers and supply-chain firms are raising hundreds of millions through public offerings, and shares of listed nuclear companies have skyrocketed since Mr Trump issued his executive orders supporting the industry (see chart 2). As Jacob DeWitte, boss of Oklo, notes: “There is no longer a scarcity mindset of reliance on government money, so we can take lots of shots on goal.”

All this is contributing to the third reason for nuclear optimism: the emergence of new financial models and operating practices that tackle the dismal economics of building nuclear plants. As Barclays

notes, both regular nuclear and SMR costs “today exceed the market price for power”. But China and South Korea have demonstrated that it is possible to build big reactors in five years and on budget (see chart 3). Both countries standardised designs, built multiple reactors per site and moved quickly between projects so as to keep workers and supply chains active, all of which helped keep down costs.

A new paper in *Nature*, a scientific journal, by Daniel Kammen of Johns Hopkins University and co-authors emphasises the importance of China’s “vast and expanding electricity market” in providing demand certainty and spurring investment in supply chains. There may be ways to recreate such demand in the West, albeit in very different circumstances. Jim Schaefer of Guggenheim Securities, an investment bank, argues in favour of financing models that aggregate heavy power users within industries (such as big tech firms) to fund nuclear fleets through risk-sharing partnerships and long-term contracts at above-market prices. In return, they would benefit from reliable power. “The average utility and its ratepayers cannot afford to fund ‘early-of-a-kind’ projects,” he explains.

Time to tinker

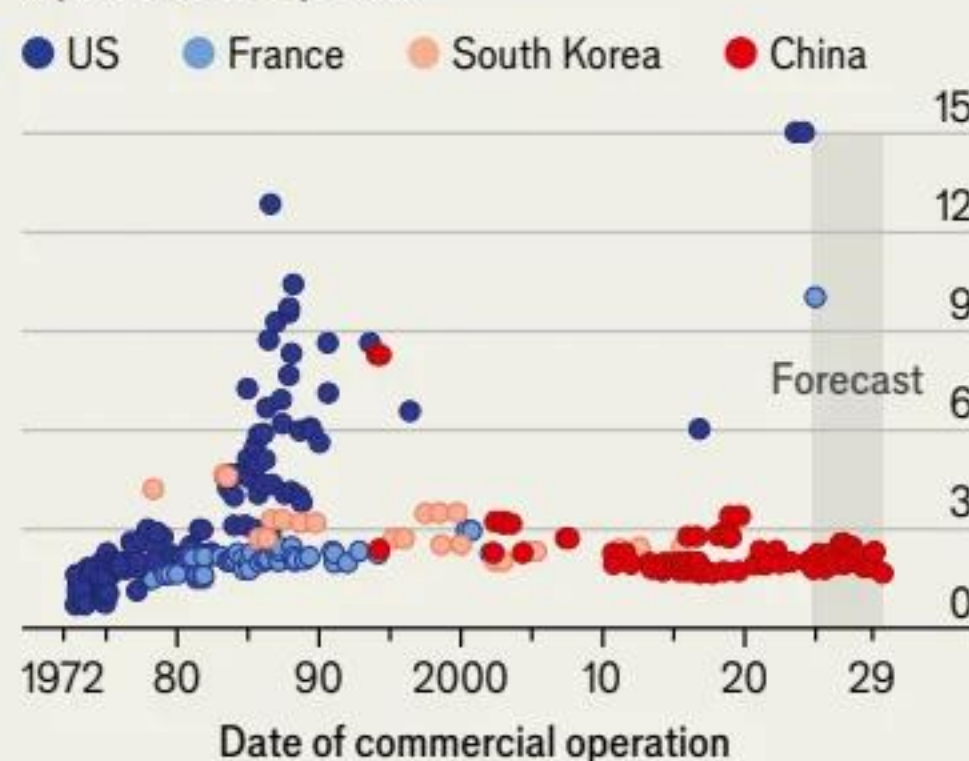
Financial innovation would make a difference, but operational advances are needed, too. “You can’t do one or two, you need ten...you need a national programme not a series of projects,” argues Armond Cohen of the Clean Air Task Force, a charity. Westinghouse seems to agree. It wants to start building ten AP1000 plants in America by 2030. The Nuclear Company plans a similar “design once, build many” approach. Patrick Maloney, the startup’s chairman, says it aims to assemble coalitions of customers to build six identical plants.

Much may yet foil a nuclear renaissance. Despite new innovations, the economics remain troublesome. Excessive regulation is still a barrier, and efforts to slash red tape risk a public backlash. Supply chains are underdeveloped; skilled labour is scarce. As those who have spent their careers in the industry are acutely aware, both government largesse and private investment can prove fickle.

Even so, pioneers are undaunted. “We don’t have the comfortable hammock of government funding to scale and commercialise,” declares Clay Sell, who runs X-energy, an SMR startup. His firm is preparing to build its first four reactors at a Dow petrochemical facility in Texas. Amazon has invested in its expansion and pledged to help it deploy dozens of units. In his view, “There is more opportunity for nuclear innovators now than even during the dawn of the commercial nuclear age in the 1960s.” It is a claim that reflects the industry’s soaring ambition, if not yet its reality. ■

Energy bills

Nuclear power plants*, construction cost†, \$ per W, 2020 prices



*Includes retired plants †If construction was completed overnight
Source: “Can China break the ‘cost curse’ of nuclear power?”, by S. Liu, G. He, M. Qiu and D.M. Kammen, *Nature*, 2025

Trend-watching

Squeezed

How Lululemon fell out of fashion

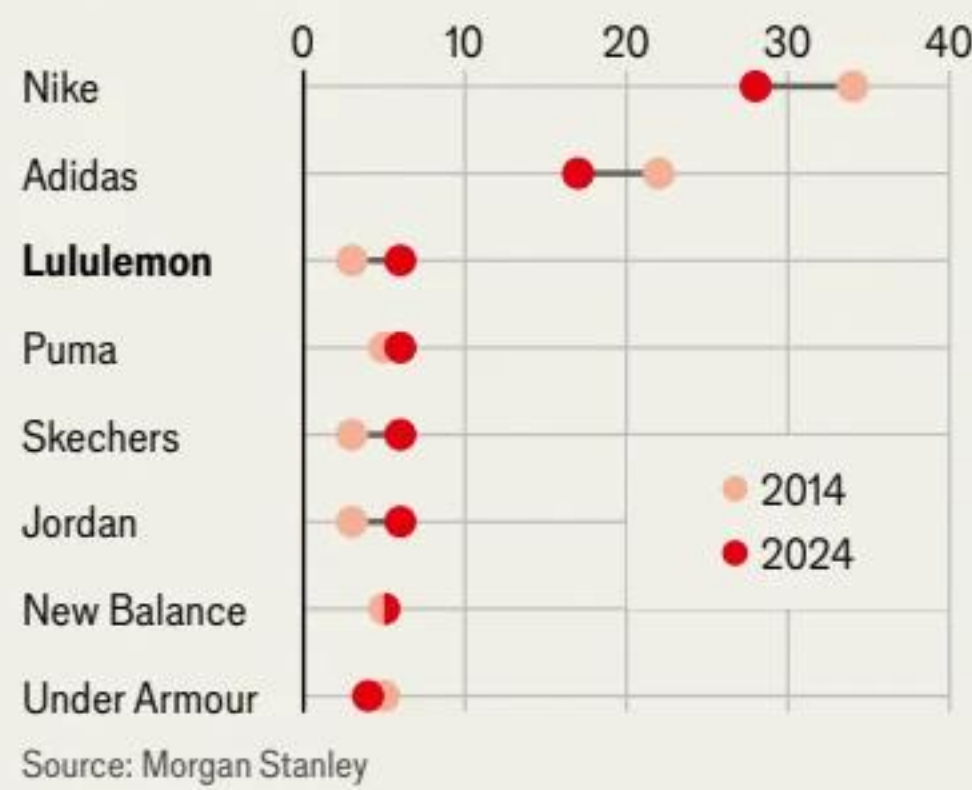
LULULEMON ATHLETICA, a brand famous for flogging leggings for over \$100 apiece, has long been in vogue among investors as well as fashionistas. Over the past decade the “athleisure” firm has reported operating margins of 15-25%, well ahead of rivals, in part owing to the vast share of sales it makes directly to customers. Its sales per square foot of shop space have reached around \$1,500 a year, also far outstripping other retailers. Lululemon’s stretchy trousers and chic sweatshirts have married comfort and fashion for a new breed of home workers who wanted to look sharp but relaxed on conference calls.

Fashion, however, is famously fickle. Analysts are expecting more bad news when second-quarter results are revealed on September 4th, after *The Economist* is published. This would add to the woes revealed for the three-month period to May 4th, when Lululemon reported declining sales in the Americas, its most important region. It has already cut earnings guidance for the full year and its shares have fallen by 45% since January. What is going wrong for the king of athleisure?

After the brand was established in Vancouver at the turn of the millennium, Lululemon quickly became the cool kid of sports retail, offering an alternative to Adidas and Nike, the industry’s behemoths. Today it is the third-biggest company in a global sportswear industry that is worth

Jogging on

World, sports clothing market share, %
Selected brands



\$446bn by net sales, according to estimates by Morgan Stanley, an investment bank (see chart). As recently as 2016, it barely made the top ten.

Despite this growth, Lululemon has not managed to interest existing customers in its latest products. The brand expanded into new areas, including shoes and regular casualwear, and has started making gear emblazoned with logos in an attempt to woo youngsters, who like that sort of thing. But as Randy Konik at Jefferies, an investment bank, says: “They are putting out products that their core customers look at and say ‘who’s going to wear this?’”

Nor is Lululemon creating the buzz that might attract new clientele. It spends only 5% or so of revenues on marketing, preferring word-of-mouth endorsements. On, a Swiss rival, devotes around 10%, signing up celebrity ambassadors, such as Zendaya, an American actress, and collaborating with trendy labels, such as Loewe. That may help explain why visits to Lululemon’s American shops dropped by over 8% in the second quarter of 2025, according to Placer.ai, a location-analytics firm. Even in China, where the firm had been growing fast, sales are now slowing.

Fashion trends have not helped. Gone are the days when fashionistas worth their Vogue subscription wore Lululemon leggings for the coffee run, school run or just to run. Hotter rivals, such as Alo and Vuori, are gaining ground. Worse still, fashion editors have pronounced that fitted clothes are out and baggy ones are in. Not only that but a survey of 10,000 customers in 13 countries last year found that 48% of consumers were wearing denim more often than before.

Then there is the economic backdrop. Lululemon operates in 25 countries and has more than 750 shops worldwide. But three-quarters of its revenues come from the Americas. In March Calvin McDonald, the company’s boss, warned investors that concerns about inflation and the economy were making all-important American shoppers “more cautious”.

Lululemon is also vulnerable to President Donald Trump’s tariffs. Last year some 40% of its products were made in Vietnam and almost 30% of its fabrics came from mainland China, two countries that have been hit hard by new duties. Mr Trump’s decision to get rid of the “de minimis” waiver, which exempted from custom duties goods in parcels worth under \$800, could raise prices and hurt sales. Ike Boruchow at Wells Fargo, another bank, reckons that about half of Lululemon’s American e-commerce orders had benefited from the waiver. Lululemon declined to comment on Mr Boruchow’s suggestion.

The king of athleisure, therefore, has turned to discounting. That hardly bodes well for the reputation of the firm, but its strategists have been left with little choice: inventories jumped by 23% year on year in the first quarter of 2025, while sales rose by just 7%. Analysts at Jefferies reckon that more than 60% of cut-price items at its outlet stores are now core products, such as its famed black leggings.

Lululemon has encountered one more problem of late. The brand’s sportswear is easy to copy. Earlier this year the firm sued Costco, a big retailer, for selling cut-price versions of its trousers and other items. In years to come, the firm’s executives might look back wistfully at the days when it was seen as a brand worth copying. ■

Antitrust

Teflon tech

LOS ANGELES

Google and Apple get enormous reprieves owing to the threat from AI

AFTER CHATGPT was launched in 2022, generative artificial intelligence (AI) quickly came to be seen as an existential threat to the search business of Google, owned by Alphabet. It has turned out to be the firm’s saviour—at least in one sense. On September 2nd Amit Mehta, a federal judge who last year declared Google an illegal monopolist, rejected the government’s demand that the search giant be torn apart, and delivered it the gentlest of punishments. The reason was AI. It “changed the course of this case”, he said.

In one of the biggest antitrust climb-downs since Microsoft was spared a breakup in 2001, Mr Mehta acquiesced to the meek remedies proposed by Google. He said that the Department of Justice had “overreached” in calling for the divestment of Google’s Chrome browser and Android operating system.

Although he banned Google from signing exclusive deals for the distribution of



Exercising choice

▶ some products including Chrome, Google Search and the Gemini app, an AI assistant, he allowed payments to its partners to continue, to avoid potentially “crippling” harm to companies that rely on them. That was a big reprieve for Apple, too, which has received tens of billions of dollars a year for making Google its default search engine.

Shares of Alphabet soared after the decision. Apple’s rose as well. The ruling eased the uncertainty that has hung over both companies all year, at a time when valuations of big-tech peers have increased sharply. It may even encourage the forging of closer ties between the two firms. Some speculate that Apple will partner with Google, running the latter’s Gemini AI products on the iPhone.

All the same, it was not unalloyed good news for Google. In an effort to encourage more competition in the search market, which the company still dominates, the ruling requires Google to share user-interaction and other search-related data with smaller competitors. Google is still expected to appeal against the original verdict that declared it a monopolist, noting that “competition is intense and people can easily choose the services they want”. Moreover, it faces the risk that it may shortly have to sell some parts of its advertising business if a second antitrust trial goes against the company.

But Mr Mehta wrote that, since last year, when he found Google liable for illegal behaviour, AI has brought big changes to the search market. He noted that hundreds of billions of dollars had flown into startups to create generative-AI products that could disrupt established search businesses such as Google’s. Chatbots like OpenAI’s ChatGPT, Anthropic’s Claude and Perplexity are being used widely for search-like functions. During hearings about the proposed remedies earlier this year, Eddy Cue, an executive at Apple, testified that the volume of Google search queries on Apple’s Safari browser had declined for the first time in 22 years. “There are strong reasons not to jolt the system and to allow market forces to do the work,” the judge pointed out.

Google will be greatly relieved. Despite the verdict, it has emerged largely unscathed from the biggest tech antitrust case in a quarter of a century. In another reprieve, on September 1st a fine it was due to receive from the European Commission for breaching antitrust rules over its ad-tech practices was reportedly delayed. That appears to be related to the to-and-fro over tariff negotiations between America and the European Union.

Not so long ago, America’s tech giants looked like they were vulnerable to a “tech-lash”. Thanks to generative AI, they are now getting most of the breaks. ■

Manufacturing success

Morocco bound

CASABLANCA, KENITRA AND TANGER MED

The country is now a trade powerhouse

THE SPRAWLING port of Tanger Med on Morocco’s north coast looks out onto the busy Strait of Gibraltar. Departing ships carry cars and goods to 180 locations across the globe. In the port itself lorries zip about on roads that shimmer in the heat. Tanger Med is set to become even larger, showing off the country’s ambitions as a manufacturing and trade hub.

Morocco’s position on Europe’s southern doorstep (and as a northern entry to Africa) has helped it insert itself into global supply chains. Foreign investment has risen swiftly. According to fDi Markets, a data firm, the country has drawn about \$40bn of greenfield manufacturing investment since 2020, catapulting itself into the list of the world’s largest recipients (see chart). As a result, Morocco’s exports have risen by two-thirds in the past five years.

The country’s officials attribute this success to the investor-friendly policies of King Muhammad VI, Morocco’s leader. To please overseas businesses, his government has poured money into electricity generation, ports, railways, roads and solar facilities. It spent between 25% and 38% a year on infrastructure from 2001 to 2017, which is among the most in the world. The results include a high-speed train that runs up the country’s west coast. On the road into Tanger Med, drivers pass endless wind and solar farms, as well as special economic zones ready to welcome investment.

Perhaps the biggest draw for European firms is a free-trade agreement that was struck with the EU in 2000. Preferential

deals with 60 other countries have followed. This drew big investments by car-makers such as Renault and later Stellantis (whose largest shareholder, Exor, is a part-owner of *The Economist’s* parent company). Suppliers, including Yazaki, a components-maker, arrived next. Such activity “showcased” the country’s investor-friendliness, says a former industry minister.

Ships now cross to Europe every hour from Tanger Med. They carry vehicles made by Renault, as well as car parts and components for other industries. Down the coast, Kenitra, an industrial zone on the outskirts of Rabat, is home to Stellantis; Lear, one of America’s biggest automotive suppliers; Faurecia, a European car-component firm; and Nexteer, a Chinese-owned one. Car firms have invested more than \$8bn overall in Morocco since 2012, about a quarter of the total foreign investment that has flowed into the country in the period. To box exported goods, International Paper, an American packaging company, has set up large facilities.

Last year Morocco became the biggest exporter of cars and parts to Europe, surpassing China and Japan. Ryad Mezzour, the country’s industry and trade minister, is intent on replicating this success in other industries. He hopes to support more than 50 high-value sectors, including aerospace and pharmaceuticals.

Beginning the climb

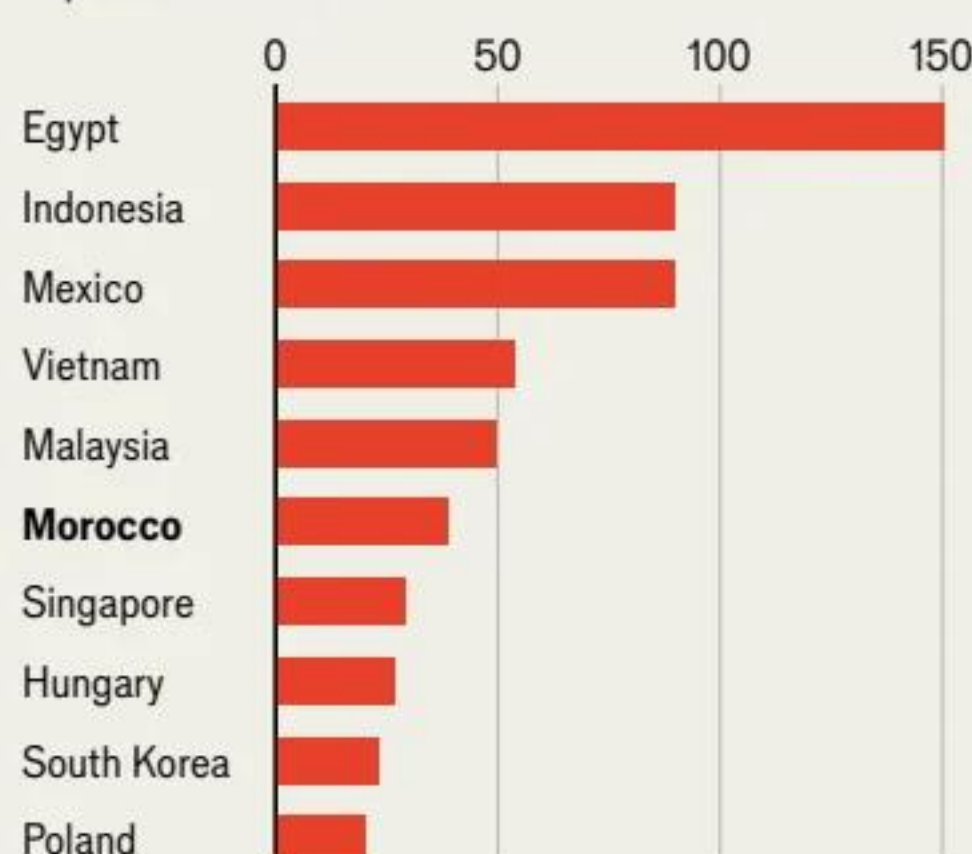
Morocco has already had some success in moving up the value chain. In Kenitra, SIMRA, a local subsidiary of Segula Technologies, a French aerospace-engineering company, churns out parts for industrial giants including Airbus, Bombardier and Safran. The firm says its parts account for about 5% of the components in an Airbus A320 jet by value, up from about 2% a decade ago. Alstom, a European manufacturer of railway equipment, produces electric switch boxes and cables at a factory in Fez, some 300km away.

This activity has made the EU Morocco’s biggest trading partner by far. Yet money is now also pouring in from China. Firms from the country have struck deals to invest at least \$10bn in electric vehicles and batteries, representing about 5% of all investments related to the Belt and Road Initiative worldwide over the past two years. Often, one boss notes, Chinese investors show up unannounced, speak Arabic and do business fast. Gotion, a battery-maker that accounts for nearly 4% of the global market, has invested over \$6bn in a factory in Kenitra. China Overseas Engineering Group is set to help build a high-speed rail line.

Such investments may come with drawbacks, however. The entanglement with China could draw Morocco deeper into Donald Trump’s trade wars. Some officials

The road to north Africa

Foreign direct investment, inflows into greenfield manufacturing, 2021-24, \$bn
Top ten countries



Sources: fDi Markets; FT Locations

▶ also worry that a strategy focusing on foreign investors has ignored homegrown enterprise. There are few domestic industrial heavyweights. Indeed, at Kenitra there is only one Moroccan company, making plastics and plating.

And despite the flourishing relationship with China, Morocco's export growth is still mainly tied to Europe—with which competition is becoming fiercer. In 2023 the European Commission imposed anti-dumping duties on aluminium car wheels;

most of these are made by CITIC Dicastal, a Chinese company with several factories in Kenitra. As a result, the firm decided to set up a new facility in Portugal, instead of a fourth in Morocco. Last year CATL, the world's biggest battery-maker, looked at Kenitra as a possible venue for a new factory but was instead lured by financial inducements offered by Spain.

Moroccan officials still hope to convince European leaders to rein in their protectionism. Yet they are also hedging their

bets by turning attention to Africa, where the country is one of the biggest investors. Morocco is leading work on a 5,600km gas pipeline to Nigeria, passing through 11 other countries. POSCO, a South Korean industrial firm, and Engie, a French energy company, have set up in Casablanca Finance City, a business and finance hub which touts itself as a gateway to Africa. All the challenges “will force us to diversify”, says Mr Mezzour, the trade minister, “and [we] will. We're very competitive.” ■

BARTLEBY

Extremely chaotic and incredibly simple

Broken workflows—and how to fix them

VERY PREMATURE babies need lots of immediate medical attention. Which is why one neo-natal team in an American hospital texted the acronym “ELBW”, shorthand for “extremely low birth weight”, to relevant clinical staff if they wanted them to get to the unit fast. Unfortunately, some recipients of this message took it to mean that a baby had a problem with its elbow, and did not require an urgent response. This excruciating story is one of many told in a new book, “There's Got To Be A Better Way”, by Nelson Repenning, a business-school professor at the Massachusetts Institute of Technology, and Donald Kieffer, a one-time operations executive at Harley-Davidson who also lectures at MIT.

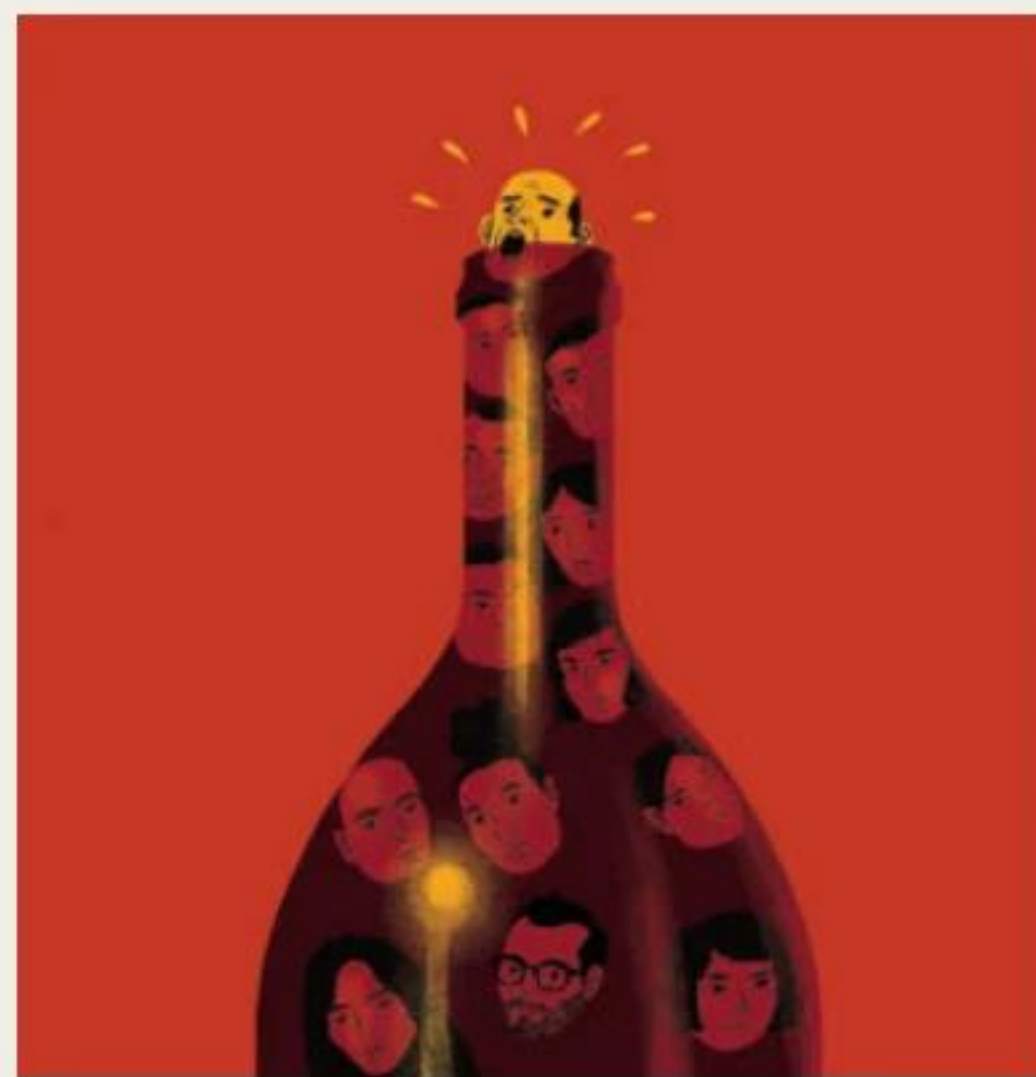
The authors' premise is that many of the processes which govern work within organisations are broken. Whether they are flawed from the outset or malfunction over time, they need constant monitoring and improvement. At the heart of the book is a simple instruction to managers: go and see how things actually work. “If you aren't embarrassed by what you find,” they write, “you probably aren't looking closely enough.”

Mr Repenning offers an example from one of his own classes: a lung-transplant surgeon in Boston who fell short of targets for the number of post-operative appointments he had. Investigating the problem turned up one unexpected issue: parking. Difficulties finding a spot meant delays rippled through the diary; a quick call the night before, offering advice on where to park, boosted the number who were seen.

The way people work around dysfunctional systems often causes problems to compound. When maintenance requests at one fuel-refining company got snarled up, for instance, operating

managers realised that they could jump the queue by labelling it a “priority one” job. In theory, this designation meant a request had safety implications; in practice, it offered a useful short-cut for some that gummed things up for everyone else.

And before any managers read this and shake their heads in exasperation, they should look in the mirror. Jobs are constantly being reprioritised because one of the higher-ups wants something else done first. Bosses' instincts to have people working at full pelt are another big problem: overload leads to bottlenecks, and bottlenecks lead to spirals of delays and workarounds. The most counterintuitive idea in the book, says Mr Repenning, is that cramming more work into a system is not going to lead to more output.



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The approvals process for IT projects at Standard Chartered, a bank, used to take 120 days on average as different risk managers assessed each specific hazard in turn. Its chief operating officer instituted a weekly meeting that brought all the relevant people together to look at a rank-ordered backlog; a decision on the project at the top of the list would have to be made before the second one was considered. With everyone at the meeting focused on a small number of agreed projects each week, and with no chance for anyone to get their pet initiative early, everything accelerated. As a consequence of this and some other changes, the average approval time dropped to only 20 days.

Much of the thinking in the book can be traced to the factories where Mr Kieffer made his career, and to one company in particular: Toyota and its restless mantra of continuous improvement. Manufacturing processes have the advantage of being very observable: if something is going badly wrong in a factory, there will probably be physical clues (loads of inventory, stopped assembly lines, a severed finger). But even when work is digital, it can still be visualised: old-fashioned tech such as whiteboards and Post-It notes can be used to show a workflow, to pinpoint problems and, crucially, to spark discussion.

Changing behaviour is hard. Bosses are busy, for one thing, and may balk at spending time observing processes in detail. But the spread of AI means that managers of all kinds now have good reason to re-examine their workflows. This refreshingly practical book suggests both that they will find all sorts of horrors when they look closely, and that a dose of common sense can solve as many problems as superintelligence.

SCHUMPETER

The rebirth of distance

Cyberspace is splintering. What will big tech do?



IN 1997 FRANCES CAIRNCROSS, then of *The Economist*, memorably proclaimed “the death of distance”. Dame Frances (as she has since become) argued in a book with this title that telecommunications technology was making geography irrelevant to business and personal lives. Some of her claims may have been overblown but, in one crucial respect, the thesis was bang on. With the exception of China, around which the Communist Party erected the cyberspatial ramparts of the Great Firewall, distance was, in all markets that mattered, dead online.

Today distance is back. On August 29th America stopped letting parcels containing goods worth less than \$800 enter the country tariff-free. This old-economy rule, first enacted as part of the Tariff Act of 1930 to ease the burden on overworked customs officials, has allowed new-economy businesses such as Shein and Temu, two Chinese e-merchants which used it with abandon, to conquer America by offering shoppers cut-price goods.

The demise of “de minimis”, as the exemption is known, is the latest, symbolic reminder to digital darlings that frontiers exist—and that business models built on their absence are in need of a rethink. The EU is beginning to enforce new rules for the bloc’s online economy and finalising those for artificial intelligence (AI). Any day now Eurocrats are expected to punish X over inadequate content cleansing in its social-media sewer. In April they fined Apple €500m (\$582m) and Meta €200m for not complying with the Digital Markets Act (DMA), which dictates what tech giants can and cannot do in its 27 member states. Countries from Australia to Brazil are considering similar laws.

No one has more at stake from distance’s rebirth than Apple, Meta and their big-tech peers, Alphabet, Amazon and Microsoft. All five have built their multitrillion-dollar valuations on business models that worked the same way pretty much everywhere. Some translation into individual markets’ vernaculars was necessary. Different rules for consumer protection had to be obeyed. Apple’s Chinese app store could not offer software disfavoured by the communists. But by and large, compliance costs were, in the words of one big-tech bigwig, marginal.

Now the online world is splintering into national or regional

internets. This is forcing the tech quintet to navigate an uncomfortable trade-off between containing costs of compliance that have become suddenly material and maintaining market access in suddenly tetchy jurisdictions.

The simplest way to limit costs is to forsake places with onerous rules altogether. In 2023 Canada passed a law requiring internet platforms to pay news outlets for links in their search results or social-media feeds. Google, which is owned by Alphabet, duly handed over C\$100m (\$72m) to a government-run fund. Meta, by contrast, concluded that this was not a price worth paying and instead blocked links to news sites on Canadian users’ Facebook and Instagram accounts.

Any hit to Meta’s revenues was probably nugatory; news makes up just 3% of the Facebook feed globally. However, as rules spread—Canada’s, for instance, were based on a similar Australian law—the exit option becomes less palatable. This is especially true if these rules affect larger markets and less peripheral bits of big tech’s business.

Alphabet’s experience in China, the outlier where distance lived on, offers something resembling a natural experiment. In 2010 Google left the country rather than censor its search results as the Communist Party demanded. At the time it was estimated to be making \$300m or so a year in the country, just over 1% of its global sales. That, Google concluded, was less than the cost of reputational damage had it kowtowed. It was almost certainly right. Yet the opportunity cost was real. Even if its business in China had grown merely as briskly as that of Apple in the period since, it would have raked in cumulative Chinese sales of some \$40bn. If its share of Chinese sales matched Apple’s 17% in 2024, it would have added \$60bn that year alone.

Between a quarter and three-fifths of the quintet’s global revenues come from outside its lightly regulated, highly profitable home market. If more large foreign markets turn Chinese, exit will no longer be unpalatable but indigestible. Sadly, staying can still cause a nasty hiccup. The five giants are cagey about how much it costs them to tweak their systems in accordance with various new digital rules being introduced around the world. But last year Meta offered an inkling in its first DMA-mandated compliance report in Europe. It said that more than 11,000 of its employees devoted more than 590,000 hours of engineering and technical work over two years to make the requisite changes to its products.

One way of converting this into dollars is to look at the cost of technical labour. A median Meta worker’s compensation comes to \$190 or so an hour (assuming a 40-hour work week, 21 days of annual leave and 12 paid public holidays). This puts the direct cost of those 590,000 hours at a modest \$110m. But if you consider that the 11,000 workers could have spent this time generating revenue, and that the average Meta employee brought in \$1.3m in 2022 and \$2m in 2023, then the cost swells to \$1bn in forgone sales over two years, equivalent to 2% of Meta’s European revenues in that time.

A Galaxy not far, far away

As engineers tinker, new products are stranded. Since 2023 Alphabet, Apple, Meta and Microsoft have all had to delay the European launches of various AI tools, often by many months. That gives smaller rivals spared the DMA’s strictures a chance to steal market share. Some Europeans tired of waiting for an AI-enabled iPhone may have bought a Samsung instead. Big tech had better get used to grappling with more such predicaments—near and far. ■

Finance & economics



Fiscal politics

Count flags, not coins

Europe's hard right has moderated, but offers little hope of growth-boosting reform

IF THE FRENCH government fails a confidence motion on September 8th, it will soon have a new prime minister. They would have to face down the National Rally (RN), a hard-right party leading the polls by a wide margin. France is no outlier: the hard right is on the march. The Brothers of Italy govern Italy; the Law and Justice (PiS) party has the Polish presidency. Reform UK leads the polls in Britain. In Germany the Alternative for Germany (AfD) is neck and neck with the conservatives.

No single factor explains the hard right's success, but Europe's economic malaise has helped. Inflation, cuts to public services and the costly green transition all advance the cause. Reasons to be cheerful are scarce, with forecasts suggesting the continent's output will not grow much faster than 1% a year any time soon. The German economy is moribund despite the government's relaxation of its fiscal rules.

America has already imposed tariffs of 15% on imports from the EU, which could easily rise. An influx of cheap Chinese goods threatens European businesses. And all the while, the ranks of retirees are swelling while birth rates decline.

How would hard-right governments approach this state of affairs? Our analysis of manifestos, speeches and policies suggests the movement has become more eco-

nomically moderate as it has matured. But it still offers little hope of growth-boosting reforms. Meanwhile, parties promise lavish support for young families and pensioners, their core constituency. The big risk, therefore, is that Europe's fiscal position deteriorates further—perhaps triggering an almighty stand-off with the bond market and the European Central Bank (ECB).

In the past Europe's hard-right parties advanced a broad, unwieldy agenda: they blended ideas of the old left with libertarian views on tax cuts and deregulation. "At the start we were heterogeneous on economic policies, but there has been a clear development to a more consistent position," says Leif-Erik Holm, an AfD member of the Bundestag. Today's hard right has coalesced on a conservative programme combining qualified support for free markets with generous handouts for some.

From their rhetoric, you might think they would curb immigration. On June 9th Viktor Orbán, Hungary's talismanic prime minister, called Europe's migration policy "an organised exchange of populations to replace the cultural base". The problem is that the continent's economy depends on migrants. Without new arrivals and the hours put in by foreign workers, Spain's output would have flatlined from 2019 to 2024. Germany's would have shrunk by 6%. ▶▶

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Hence why, when the hard right wins power or influence, immigration continues unabated. After Brexit, arrivals to Britain fell from the EU, but surged overall. In Poland, under PiS, they rose from 86,000 in 2015 to 224,000 in 2021, then soared after Russia invaded Ukraine. Giorgia Meloni, Italy's prime minister, has just approved 500,000 work visas for the next three years, on top of 450,000 over the past three.

Instead of cutting immigration, many parties—including France's RN—favour making life harder for migrants. Plenty seek to mimic Germany's old guest-worker schemes, bringing in foreigners without offering them the same services as natives or integrating them into society. Jordan Bardella, the RN's president, wants "national preferences" for public services, jobs and housing, and a tougher path to citizenship. Ms Meloni recently encouraged voters to abstain from a referendum that would have reduced the residency requirement for citizenship from ten to five years.

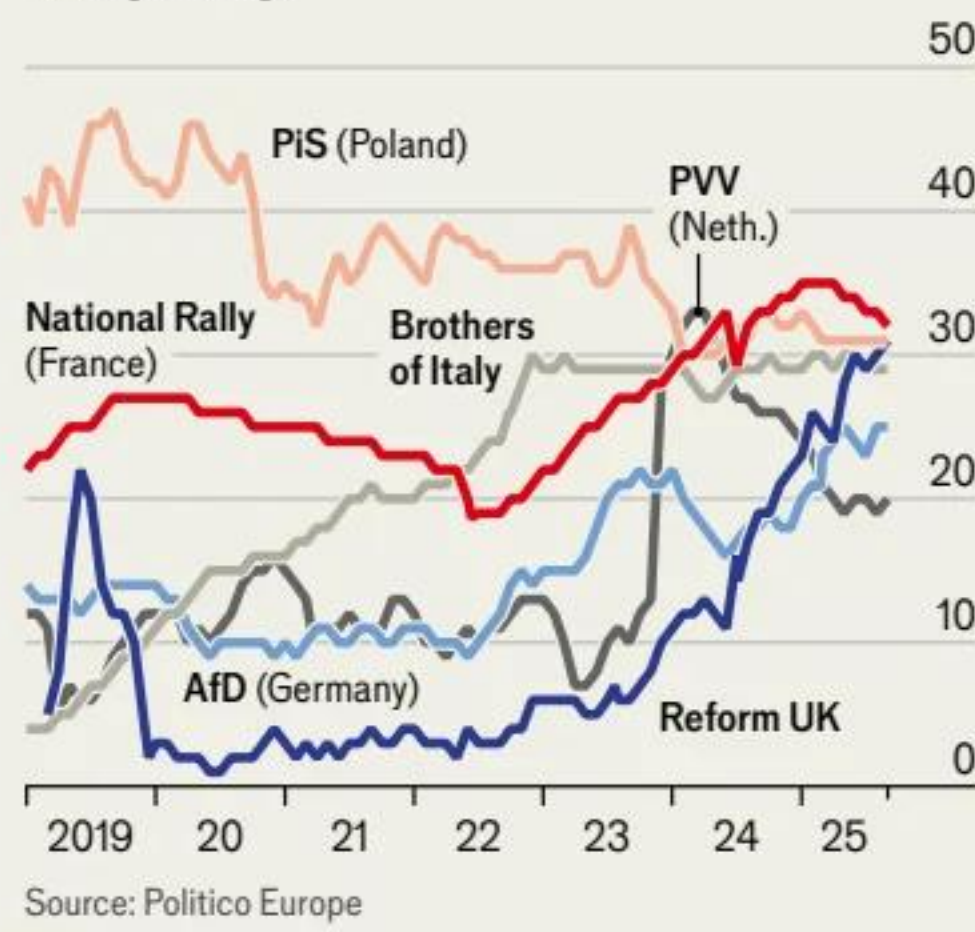
Meanwhile, the hard right now pursues its Euroscepticism more obliquely. Once, it would have pressed for more countries to leave the bloc. But recently many parties, including the Dutch Party for Freedom (PVV) and RN, have ditched this goal. Others, such as the AfD, hint that their promises to leave the euro are mostly for show. Instead, those parties now want to reform the EU from within. "We do not want to leave the table. We want to finish the game and win, to take power in France and in Europe and give it back to the people," Marine Le Pen, the RN's most prominent politician, has said. The AfD's Mr Holm wants to see more national decision-making: "Common rules are fine, but every country has to be on board."

Although it has made peace with the EU, Europe's hard right is critical of trade deals entailing co-operation on migration or regulation, or lowering protection for farmers. Along with Emmanuel Macron, the French president, they oppose an agreement between the EU and Mercosur, a Latin American bloc, which is being ratified. President Donald Trump's aggressive trade policy provokes much bristling, though hard-right politicians tend to blame the EU for it. "The trade deal concluded by Ursula von der Leyen with Donald Trump is a political, economic and moral fiasco," wrote Ms Le Pen.

Many hard-right parties still take a tough line on climate change, opposing, say, net-zero targets. "Whether we eat meat, catch a plane or drive a gasoline car is something we decide for ourselves. Not Brussels," reads the manifesto of the Dutch PVV. Yet those in power tend to change tack. Ms Meloni has made green investment easier and streamlined regulations. PiS is a fan of nuclear power, and has supported renewables and grid extensions.

Forward, comrades!

Europe, selected hard-right parties' vote share, %
Polling average



The economic moderation is welcome, but growth-boosting policies are absent. German-style guest-worker schemes might make immigration more politically palatable, but would prevent migrants from reaching their full economic potential. An EU that devolved more power to member states would be even more sclerotic. A recent study by the European Parliament concluded that greater integration of the market for services could boost annual internal trade to between 8% and 10% of GDP by 2032, from the current level of 6.3%. But this would require common legislation that infringed on national sovereignty. Meanwhile, trade deals excluding agriculture or concessions on migration would have minimal value.

And then there are the handouts. Hard-right parties want to reward "insiders for the contributions they have made", says Jérémie Gagné of More in Common, a research outfit. Pensioners fit the bill perfectly. PiS has reversed a reform to raise the retirement age to 67, putting it back to 65



for men and 60 for women. Ms Meloni wants to do something similar in Italy.

Ageing societies need more babies if they are to shun migrants; the hard right offers generous benefits to this end. In Poland the Family 500+ child benefit, introduced by PiS in 2016, has been raised from 500 zloty (\$140) to 800 zloty a month. Marlena Maląg, a former PiS family minister, said in 2021 that her demographic plan was based on "pro-family policy, not on migrants". In Britain Reform wants to scrap a two-child limit on universal credit, the country's main welfare payment. The AfD promises a €20,000 (\$23,000) pension subsidy to parents for each child they produce.

In Italy, Ms Meloni is running a tight ship. She has avoided fights with the European Commission, from which her country is set to receive €54bn in pandemic recovery funds. But elsewhere the hard right's policies would cost a staggering amount. In February the German Economic Institute and the German Institute of Economic Research calculated that the AfD's plans would add €150bn-180bn to the deficit, which last year came to €120bn. *The Economist* calculates that Reform's plans would add costs of some £200bn a year and save just £100bn (with tax cuts comprising much of the shortfall). The claim that reduced spending on migrants could lead to big savings is ludicrously overblown.

Getting yippy already

In France, the RN's plans would add a less alarming €14bn to the deficit, according to calculations made last year by the IFRAP Foundation, a think-tank. Even so, investors are fretting. France's borrowing costs are now on a par with Italy's, owing to political paralysis over how to trim its deficit of 5.4% of GDP (see next story). An RN-led government seems unlikely to cut it. Other hard-right parties would face similar, if less acute, problems. Without a growth boost, the fiscal outlook would be bleak even if they curtail their spending plans. In time, that could lead to a stand-off with the ECB, which backstops European government debt. It would also pit hard-right governments against each other.

More worrying still is what happens next. "Do not be fooled by the first term," warns Christoph Trebesch of the Kiel Institute, a think-tank. He has studied governments of the hard right since 1945, and found that over a 15-year period they lowered GDP per person by more than 10%, on average, compared with moderates. "There is the risk of favouring politically connected firms, building up a parallel oligarchy that has no interest in a free, competitive market," adds Mr Trebesch. "It's a consistent pattern." Even if the hard-right governs relatively sensibly in its first term, damage will be done. The reforms that Europe urgently needs will not be. ■

ECONOMIST
IMPACT

Solving AI's power problem

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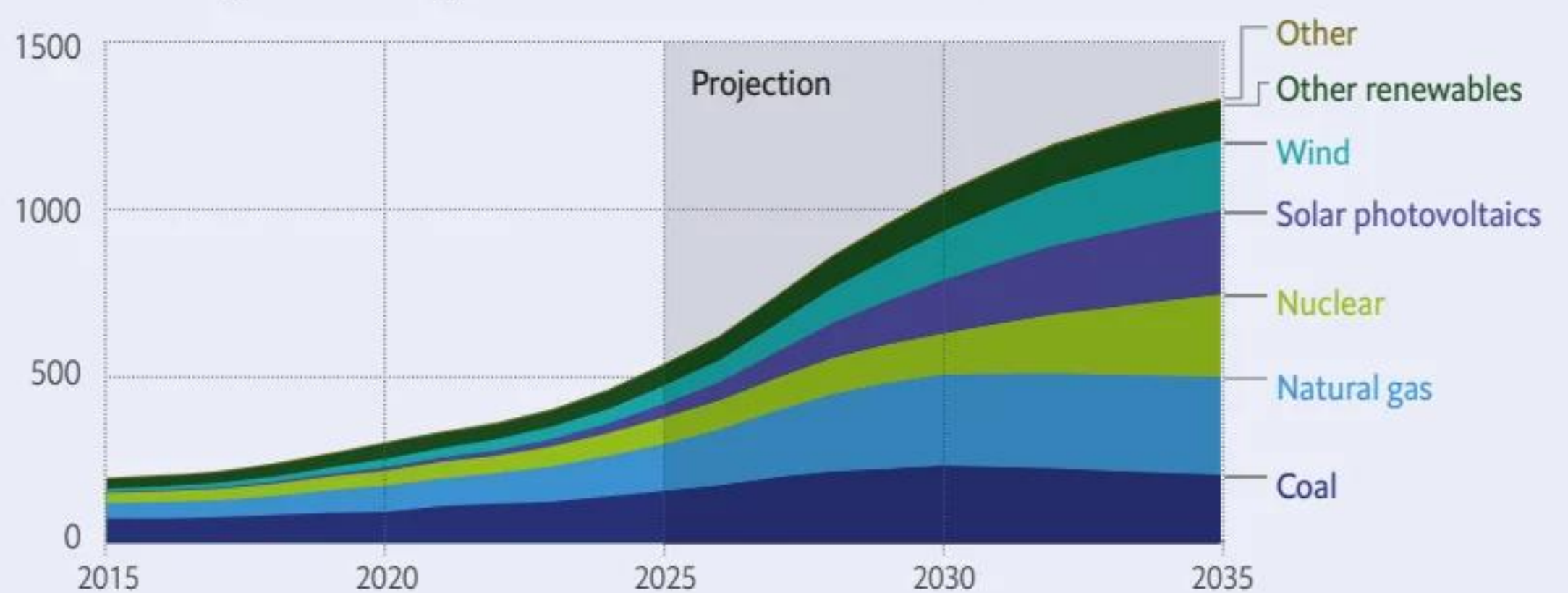
The world excels at diagnosing its ailments. From climate change to inequality, we've mastered the art of identifying what's broken. But what about fixing it? The Solutionist, a new series from Economist Impact, flips the script—applying the same analytical rigour to solutions that we typically reserve for problems.

Our latest article explores the innovations emerging to meet AI's voracious energy appetite. First, cooling superhot server farms. In a typical data centre, 40% of electricity goes to fans and chillers. Liquid cooling can halve that consumption, while more advanced techniques—including the complete immersion of hardware in biodegradable fluids—can cut it by 80%. Researchers are also developing microfluidic channels etched directly into chips, which could eliminate bulky cooling systems entirely.

Second, smarter AI. Google's custom chips use up to 1.9 times less power than conventional processors, while some startups have pushed even further—achieving 90% energy reductions through specialised designs. At the same time, algorithmic "pruning"—which strips away redundant calculations—cuts compute operations by three-quarters without sacrificing model accuracy. Add flexible computing and the efficiency gains multiply.

Power portfolio

World, fuel type and energy use for data centres, terawatt hours, 2015-2035*



Source: International Energy Agency
* Base-case scenario, whereby AI-adoption and energy-supply trends continue

Third, cleaner power sources. Renewables are forecast to contribute just over two-fifths of data-centre electricity by 2035, while the amount of power supplied by nuclear energy is set to triple. Together, these advances are helping to shrink AI's carbon footprint—although whether they can keep pace with the sheer scale of exploding demand remains to be seen.



Find out more at

impact.economist.com/projects/the-solutionist/powering-up-innovation

France's bond market

On borrowed time

A stand-off looms between bond vigilantes and French politicians

JUST HOW far can French politicians push the bond market? Efforts to slash the country's American-style deficit, which sits at 5.4% of GDP, might soon bring down another government. On September 8th François Bayrou, the prime minister, will face a confidence vote over his proposed spending cuts. He seems almost certain to lose. Should that lead to another minority government, the chances are low that it could secure enough votes to pass a budget that would meaningfully lower borrowing. Meanwhile, the yield on ten-year French government bonds has climbed to 3.6%, above Greece's ten-year yield and on par with that of Italy, the continent's usual fiscal flounderer (see chart).

Although worrying, France's position does not suggest an imminent crisis. The country's rising debt load, currently 114% of GDP, is high but the risk of bond-market stress is moderate, according to the IMF. That is in part because the French government would need to generate only a relatively small fiscal surplus in order to stabilise its debt-to-GDP ratio. According to a forthcoming paper by Bruegel, a think-tank, such stabilisation would require the "primary surplus" (meaning the budget surplus before accounting for interest payments on existing debt) to be 1.2% of GDP, which is nowhere near the 3.5% of GDP that Greece's creditors, France among them, demanded at the height of the euro crisis. Greece's primary surplus in 2024, for comparison, was a Herculean 4.8% of GDP.

France's problem is its starting point. The government ran a primary deficit of almost 4% in 2024. In other words, it would have to enact some combination of spend-

ing cuts and tax rises worth about 5% of GDP to stabilise its debt level. Doing so would be sufficiently politically fraught to undermine any prime minister's chances of staying in office. Attempts to fix the public finances are therefore likely to backfire by raising the odds of less responsible politicians assuming power—as Mr Bayrou's government is discovering.

As a result of this dynamic, the range of potential outcomes is wide. In turn, that makes the fiscal position worse. "Uncertainty over taxes or interest rates could undermine investment further, and hit consumers' confidence too," says Charlotte de Montpellier of ING, a bank. Already, the French economy is stagnating and likely to continue to do so, according to surveys of sentiment among services and manufacturing firms. By raising government-bond yields, stalling efforts at fiscal consolidation also raise borrowing costs for French firms and individuals. That slows growth by crimping investment and consumption, reducing the tax receipts that might otherwise cut the deficit, and making debt harder to stabilise relative to GDP.

Policymakers are wisely paying attention. "I am looking very attentively at the French bond spreads situation," said Christine Lagarde, the president of the European Central Bank (ECB), on September 1st. The central bank is the lender of last resort in all but name for European public debt. It has assembled an alphabet soup of debt-buying programmes intended to keep the euro zone's bond markets stable, and spreads between different countries' yields contained. The political bargain is that countries adhere to "macroeconomic reasonability", as a former ECB official calls it, in return. But this backstop was never intended for use by the core economies, France and Germany, which ultimately stand behind the ECB's balance-sheet. Even if investors now think France's bonds are as risky as those of peripheral countries—as shown by yield spreads relative to German bunds—the ECB will be reluctant to intervene on its behalf.

That may turn out to be a good thing. "There is a consensus between Republicans and Socialists that the public deficit is an issue. Even the extreme right is recognising that deficits need to come down," says Xavier Ragot, president of the French Economic Observatory, another think-tank. But as yet, this recognition—along with Mr Bayrou's efforts—has been insufficient to force a compromise between centre-left and centre-right parties. The consequence might be that it is a problem for France's next president, quite possibly drawn from the hard right. And the longer this drags on, the larger the fiscal mess will be. "The faster the crisis comes, the better," argues one analyst. Perhaps the Greek government can then offer some advice. ■

Commercial property

Raise the roof

NEW YORK

America is escaping its office crisis

FOR MOST people the covid-19 pandemic ended years ago. But not for commercial-property investors and their lenders. Working from home prompted an office slump that lasted far longer than mask mandates and lockdowns. Starting in 2022 aggressive interest-rate rises hurt the sector even more, by making mortgage loans far more expensive to roll over. The banks that financed it, especially the smaller ones, have been brutally squeezed as credit quality has deteriorated.

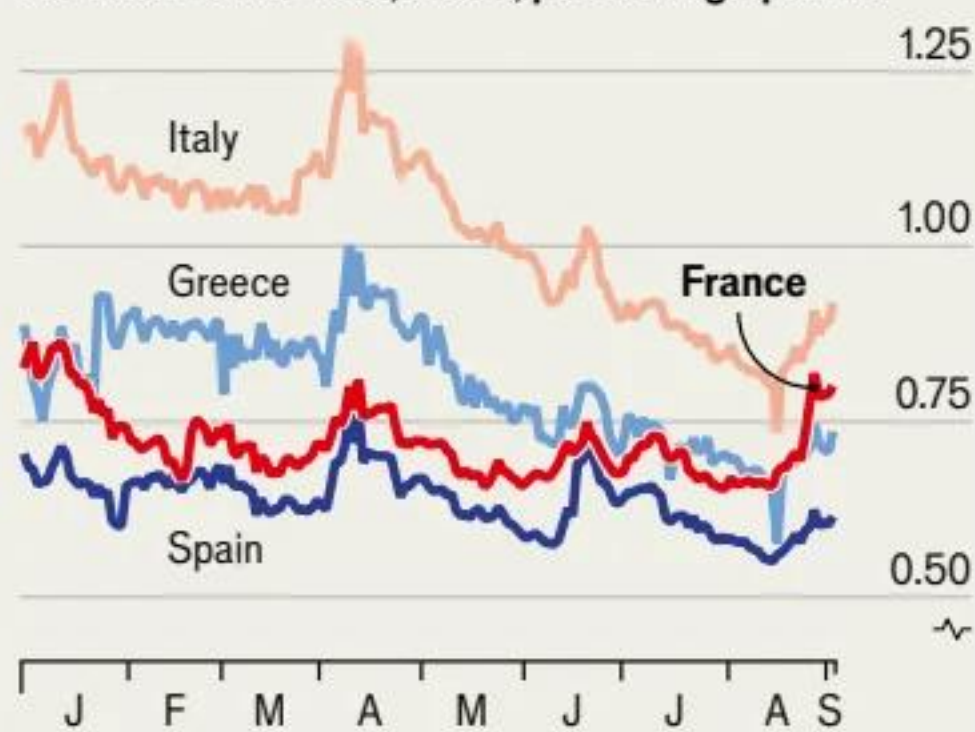
At first glance, things look as bad as ever. The vacancy rate for American offices was a record 20% at the end of June, almost double where it was at the end of 2019. In real terms the price of floorspace has dropped by half since 2021. A square foot is now as cheap as in 2010, after the global financial crisis. Some 8% of commercial-mortgage-backed securities (CMBS) secured against office buildings are in delinquency or foreclosure, the most on record.

But after half a decade of turmoil, commercial-property investors may have at last hit rock bottom. A fragile, slow recovery appears to be taking place. The multi-trillion-dollar market for owning and financing America's workplaces is changing, too, as banks back away and fast-growing private-credit outfits fill the gap.

According to CoStar, a commercial-property research firm, this quarter is the first since 2020 in which America's five biggest commercial-property firms—CBRE, Colliers, Cushman & Wakefield, JLL and Newmark—have lifted their earnings outlooks simultaneously. The share prices of the five are up by between 20% and 39% so far this year, and several have hit records. ►►

Going south

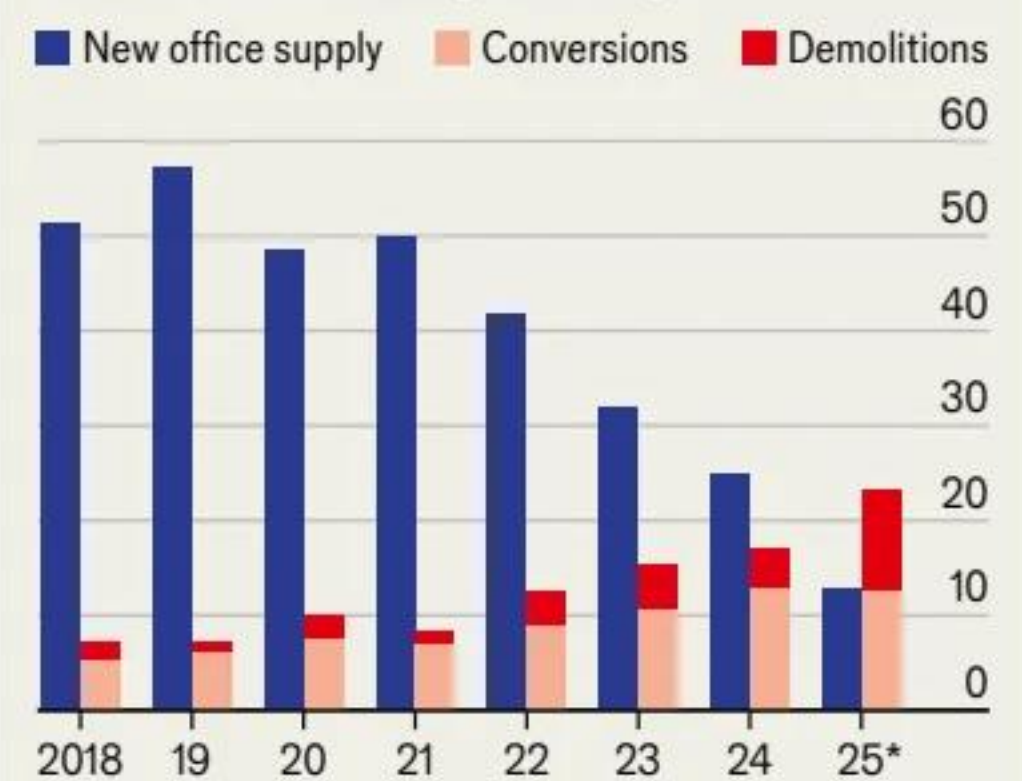
Ten-year government-bond yields, spread over German bunds, 2025, percentage points



Source: LSEG Workspace

Time to rebuild

United States, office space, m sq ft



Source: CBRE Research

*Forecast

Part of the explanation lies in dwindling supply. Only 13m square feet of office space will be built this year, down from 50m or so each year between 2018 and 2021. Demolitions and conversions into housing mean that total American office space will shrink for the first time in at least a quarter of a century, according to CBRE. In cities where house prices have soared, converting offices into much-needed blocks of flats makes obvious sense.

American banks, particularly smaller ones, are exposed to commercial-property loans. And so in recent years lenders have slashed their commitments (promises for funding) to developers and other real-estate companies. According to Bill Moreland of BankRegData, a research firm, the volume that borrowers had yet to tap dropped from \$465bn at the end of 2022 to \$306bn in the first quarter of 2025. But in the second quarter such unused commitments rose, albeit by a small amount.

A turnaround is more obvious in the CMBS market, where volumes have surged this year. In total \$15.2bn in bonds that are between half and fully collateralised by offices have been issued, up from \$4.3bn in 2024 and just \$400m in 2023. With four months to go, 2025 is already the third-strongest year in the past decade.

The market is undergoing structural change, too. As the value of offices slumped, the loan-to-value ratios of mortgages attached to them rose. That left banks holding riskier loans and drove up their own loan-to-value ratios—a closely watched measure of financial health. As the banks have pared back lending, a variety of alternative lenders with higher risk appetites have stepped in. This year Blackstone, a private-investment giant, raised \$8bn for its joint-largest real-estate fund, which will hunt out distressed properties. Brookfield Asset Management, another investment firm, raised almost \$6bn for its own new real-estate fund.

This trend is set to continue. Moody's, a credit-rating firm, expects about \$1trn-worth of commercial property mortgages in Europe and America to shift to new private creditors over the next three to five years. Life insurers and private-credit funds are especially likely to snap up the mortgages banks no longer want.

As far as commercial-property prices go, though, the recovery will probably remain a slow one. According to the Survey of Working Arrangements and Attitudes, a research project, Americans spent 27% of their working days at home in July, a figure that has remained pretty constant over the past year. Demand for new office space is limited, and converting unused offices into housing will reduce oversupply only gradually. But for investors who have endured a five-year battering, an end to the punishment will be welcome. ■

Digital finance

The people's money

HONG KONG

Would China's leaders really want stablecoins to succeed?

ERIC TRUMP, the American president's second son, has been called "the top diplomat of the bitcoin nation". Last month his mission took him to the People's Republic of China, where he spoke in Hong Kong at Bitcoin Asia, a conference dedicated to the original cryptocurrency. What is it trading at today, he asked, while on stage: "112-113,000?" The correct answer (\$110,143) was right behind him, continuously updated on a big screen.

Bitcoin's volatility helps explain the appeal of stablecoins, digital tokens pegged in value to a more established currency. The hope is that stablecoins will retain the advantages of cryptocurrencies, such as cheaper, quicker, round-the-clock settlement, without the gut-wrenching gyrations in value. More than 99% of stablecoins, now collectively worth over \$280bn, are pegged to America's currency. In July Eric's father signed the GENIUS Act, which paves the way for regulated dollar stablecoins, widening their appeal to institutional investors and ordinary punters. The aim is to entrench dollar dominance in the new world of digital finance. America, Eric said, is winning the "digital revolution". How might China respond?

With some disquiet. China has long sought to end its dollar dependence. At a summit of the Shanghai Co-operation Organisation in Tianjin on September 1st, the organisation's ten members, which include China, India and Russia, promised to settle a greater share of transactions between themselves in local currencies. China settled over 30% of its current-account transactions (including trade in goods and ser-

vices) in yuan in the first half of this year, up from 15% in the whole of 2019.

China's cabinet is considering a "roadmap" to boost its currency's usage overseas, according to Reuters, a news agency. That may include yuan-backed stablecoins. But America's enthusiastic embrace of the technology has put China in a bind. China banned cryptocurrency trading in 2021. It also puts tight controls on how much residents' capital can leave the country, which stablecoins might weaken.

Hong Kong may offer one way out of this bind. Unlike mainland China, the territory permits capital to flow freely. And to keep up with rival financial centres it has encouraged experimentation in virtual assets. It also has a crypto-curious public. The company behind the world's most popular stablecoin, Tether, started life in Hong Kong. Even the city's law firms are becoming crypto-savvy. After unknown scammers defrauded a Hong Kong company of \$2.7m-worth of Tether, lawyers served the miscreants a "tokenised" court order via a blockchain.

As luck would have it, Hong Kong's new stablecoin legislation came into effect on August 1st. The rules try to ensure that regulated coins are indeed stable. They require issuers to have capital of at least HK\$25m (\$3.2m) and to back their coins with a pool of safe, liquid assets worth at least as much as the coins' face value. They also require issuers to collect customer information, submit to audits and comply with regulations against money-laundering. All this will make the coins safer to hold but less profitable to operate.

Most stablecoins now in circulation around the world are held by crypto speculators. Yet Hong Kong's regulators seem keen to encourage other uses, such as supply-chain financing and cross-border payments. Last year the authorities allowed some firms to experiment with stablecoins inside a "regulatory sandbox". They included a subsidiary of JD.com, a Chinese e-commerce giant, and Standard Chartered, a bank founded in 1853. None of them were crypto-trading platforms.

In principle, stablecoins issued in Hong Kong could be pegged to the offshore yuan, which trades separately from its onshore twin. That would allow China to test the international appeal of yuan stablecoins while holding them at arm's length. One problem, however, is that yuan stable-

Where rivers meet

Net inflows of stablecoins to China, 2024, \$bn

By source



*Excludes China

Source: "Decrypting crypto: how to estimate international stablecoin flows", by M. Reuter, IMF Working Papers, 2025

BUTTONWOOD

Lithium's fake rally

Why supply shocks are a trap for commodity investors

COMMODITY MARKETS look deceptively simple. The prices of raw materials, unlike those of bonds or stocks, seem to move according to how much raw material there is—forget obscure data somewhere on a balance-sheet. When the supply of a commodity shrinks, prices go up. When supply expands, they go down. Inventories are buffers against shocks: when they are low, prices move more, and vice versa.

The problem is that supply shocks never quite live up to the initial excitement. Take, for example, lithium. In late July the white metal, which is mainly used to make batteries for electric vehicles (EVs), looked dull. For more than a year, a global glut had been keeping spot prices for lithium carbonate, the most traded form, near \$10,000 a tonne, 90% below their peaks a few years ago. And it was summer, so investors were bored.

In early August China's government shook them from their torpor by forcing Jianxiawo, a big lithium mine, to close after its permit expired. Soon it emerged that other mines also had licensing trouble. Investors became giddy. Was China at last curtailing capacity in an industry dogged by overproduction? Lithium prices rose by over 8%; outside China, the shares of lithium miners jumped by between 5% and 30%. But soon prices fell again. Most are now back near where they started, even though Jianxiawo remains shut.

To understand why, go back to 2022, when lithium spot prices surpassed \$80,000, setting records. To excitable sell-side analysts, the surge was down to an unstoppable campaign to replace the world's petrol cars with EVs. This, they argued, would keep lithium's price stratospheric for many years. In fact, says Tom Price of Panmure Liberum, a



bank, the rally was a one-off, triggered by old-fashioned carmakers starting to make EVs. Even though most lithium is sold under multi-year contracts, they and their battery suppliers rushed to the thin spot market, exaggerating price moves.

Soon, however, everyone was stocked up. And it turned out that, once the post-covid consumption spurt was over, EV sales stopped growing so fast after all. As lithium demand fell accordingly, prices cratered. Any potential spark to reignite the market would have to come from a supply shock. Eventually one arrived: by shutting the Jianxiawo mine, Chinese officials have trimmed up to 3% from the world's lithium supply. Yet even if it remains closed, the global market will end 2025 in surplus, says Adam Megginson of Benchmark Minerals, a data firm. And little new evidence has emerged that China aims to curb production. On August 29th lithium prices fell after a small mine in Jiangxi renewed its licence.

Lithium illustrates a broader point: in commodity markets, supply shocks are rarely a sound basis for investment. For a

start, the decisions that cause such shocks are often political, and so can be swiftly and unpredictably undone. In early July, after Donald Trump said he would impose levies of 50% on copper imports—which make up half of America's copper supply—prices set records on the country's main commodity exchange. Then, in late July, America's president exempted raw materials, including copper ores and refined copper, from the duties. Prices collapsed.

Moreover, supply problems are often resolved quickly. Refineries are repaired. Mines restart. When crucial waterways are blocked, tankers take new routes, as happened when Red Sea traffic became the target of Houthi missiles. New supply can often be brought online quickly, too. During the covid-19 pandemic, when lockdowns depressed demand for energy and building materials, producers curtailed supply. When lockdowns ended and demand rebounded, supply fell short, meaning that prices jumped. Analysts were quick to hail a new commodity supercycle, but soon enough supply rose again. The rally ended.

Although some supply shocks do last, their effects can still dissipate fast, because high prices sap demand. In February the Democratic Republic of Congo—which supplies 70% of the world's cobalt, another battery ingredient—stopped exports for four months. It has since extended the ban until September, and cobalt prices have soared. But they may soon come down, then stay low. Wary of a repeat, many carmakers are opting for batteries that use much less cobalt, or even none at all. The only solid foundations for commodity booms are structural shifts in demand. Those claiming otherwise are often trying to take punters for a ride.

► coins would have to be backed by yuan-denominated assets, which are scarce outside the mainland. Hong Kong's pool of such deposits amounted to less than 1trn yuan at the end of July, compared with over 300trn on the mainland. Although China's central bank has issued short-term borrowing instruments in Hong Kong, which could serve as backing for a stablecoin, it sometimes buys them back again when it wants to stop the offshore yuan strengthening too far above the onshore one. That

makes the supply of safe, liquid assets denominated in offshore yuan “unpredictable”, points out Morgan Stanley, a bank.

Yuan stablecoins might, therefore, prove impractical. If not, they would bring dangers. Despite the ban on crypto trading, Chinese mainlanders already trade more stablecoins than the authorities would like. A new paper by Marco Reuter of the IMF uses artificial intelligence to identify the geographic location of crypto wallets. He estimates that in 2024 China

bought \$18.6bn of stablecoins from the rest of the world and sold \$3.6bn. Binance, a crypto exchange which cannot be accessed directly from mainland China, was a big source (see chart). Mr Reuter's figures are far higher than alternative estimates, which assume the Chinese do not disguise their location using digital tricks.

The first firms to win stablecoin licences in Hong Kong will not peg to the yuan. Instead, they will almost certainly pick the Hong Kong dollar. This has been called ►►

▶ the “original stablecoin”. It has been tied to the American dollar since the 1980s. The peg is backed by a vast trove of dollar assets held by the Hong Kong Monetary Authority (HKMA), the de facto central bank.

Such a chain creates an intriguing geopolitical irony. If stablecoins take off, they will raise demand for assets to back them. That will put upward pressure on the Hong Kong dollar, obliging the HKMA to sell its currency and buy American dollars to keep the exchange rate stable. The city’s experiments, if successful, could raise demand not for the yuan but for dollar assets. Indeed, the HKMA might be obliged to buy a little more of the government debt issued by Mr Trump’s administration. At Bitcoin Asia, his second son enjoyed an “incredible reception”. He may soon have even more reason to thank Hong Kong. ■

Consumer prices

That sinking feeling

SINGAPORE

The threat of deflation stalks Asia’s economies

JUST AS THE inflationary heat is rising again in America, much of Asia is feeling a chill. Leave aside the hotspots—Japan and Bangladesh—and the average rate across the continent’s ten biggest economies is a tame 1.3%. Consumer prices have fallen outright in China, the biggest of all, and in Thailand. Other Asian economies, including the Philippines, are not far from deflation. Even in inflation-prone India prices rose by just 1.6% in the year to July, the slowest rate since 2017. In some Asian economies inflation is within central bankers’ target ranges. But in five it is now below these, and even in on-target countries the trend is disinflationary.

It is tempting to blame Donald Trump’s tariffs. In theory, they should hit Asia as a demand shock, reducing both export prices and output. That, though, is not what has happened of late. Instead, firms “front-loaded” shipments before the tariffs came into force, with the result that many Asian countries’ exports to America soared. And Asia’s missing inflation in any case dates back to the second half of 2024, before Mr Trump was re-elected (see chart). His tariffs might tug down prices in the future, but they do not explain the past year.

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What does, then? One culprit is Chinese overcapacity, which has entrenched deflation domestically. It has also put pressure on prices elsewhere: since 2022 China’s export-price index has fallen by 15%, even as exports have risen. Although the spillovers are global, Asian economies have probably been hit hardest. Over the same period, China’s goods-trade surplus with developing countries in Asia has almost doubled. Prices of cars in Thailand, where cheap Chinese models increasingly dominate, fell by 6% in the year to July. Relentless competition from Chinese smartphone makers has dragged down the prices of these in Vietnam and Singapore.

Commodity markets, chiefly for fuel and food, have also exerted a cooling effect. The decision of the Organisation of the Petroleum Exporting Countries and its allies to ramp up drilling has kept oil prices quiescent. Meanwhile, food inflation—which has been high for years because of the war in Ukraine and damage to harvests from hot weather—has subsided. As recently as 2024 the average food-inflation rate in Asia’s ten biggest economies (again excluding Japan and Bangladesh) was 5%. By July it had fallen to 1%. The speed of the decline is not only due to “base effects”, meaning that the current inflation rate is calculated using last year’s high prices as a starting point. A surfeit of pigs in China has resulted in pork-price deflation, which Chinese officials have recently pledged to combat by shrinking herds by 1m.

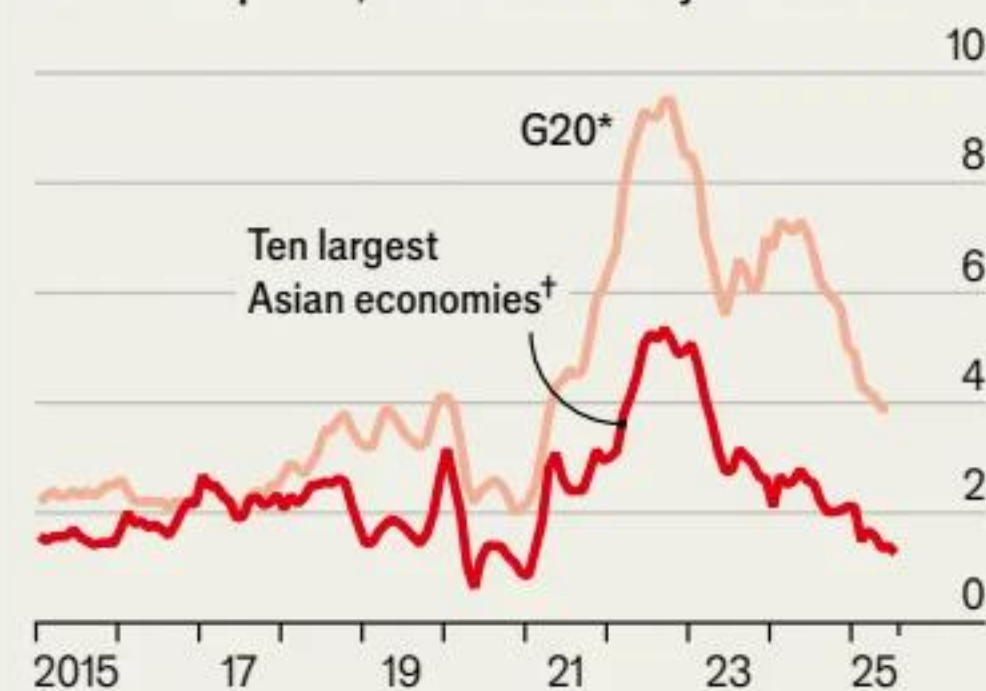
What is more, demand in many Asian countries is weak. Some places, including South Korea, are experiencing business-cycle slumps. In others, sluggish demand reflects structural flaws in their economies. Indonesia’s increasingly uncompetitive manufacturing sector has been laying off workers, denting consumer confidence.



Bargain hunting

Fire and ice

Consumer prices, % increase on a year earlier



*Weighted average †Excluding Bangladesh and Japan, unweighted average
Sources: Haver Analytics; OECD

Wage growth across Asia has been decelerating. In several countries a growing supply of workers has put downward pressure on wages, notes Miguel Chanco of Pantheon Macroeconomics, a consultancy. Labour-force participation has surged in the Philippines and broken records in India, Indonesia and Malaysia. Fresh memories of the global inflationary surge of 2022, to which most Asian households were painfully exposed, may have pushed more people to seek work. Asia’s central bankers also seem fearful of a repeat. In general, their monetary policy is too restrictive given threats to demand, says Alex Holmes of the Economist Intelligence Unit, our sister company.

Expect Mr Trump’s tariffs to entrench the low-inflation trend. As the levies sap American demand for Asian exports, they will also intensify a race to find new markets. A dash to cut prices could well follow. For consumers battered by recent cost-of-living shocks, falling prices may seem like good news. In reality, they are a symptom of Asia’s faltering economic health. ■

FREE EXCHANGE

Normal people

What if artificial intelligence is just another technology?



OPINIONS ABOUT artificial intelligence tend to fall on a wide spectrum. At one extreme is the utopian view that AI will cause runaway economic growth, accelerate scientific research and perhaps make humans immortal. At the other extreme is the dystopian view that AI will cause abrupt, widespread job losses and economic disruption, and perhaps go rogue and wipe out humanity. So a paper published earlier this year by Arvind Narayanan and Sayash Kapoor, two computer scientists at Princeton University, is notable for the unfashionably sober manner in which it treats AI: as “normal technology”. The work has prompted much debate among AI researchers and economists.

Both utopian and dystopian views, the authors write, treat AI as an unprecedented intelligence with agency to determine its own future, meaning analogies with previous inventions fail. Messrs Narayanan and Kapoor reject this, and map out what they see as a more likely scenario: that AI will follow the trajectory of past technological revolutions. They then consider what this would mean for AI adoption, jobs, risks and policy. “Viewing AI as normal technology leads to fundamentally different conclusions about mitigations compared to viewing AI as being humanlike,” they note.

The pace of AI adoption, the authors argue, has been slower than that of innovation. Many people use AI tools occasionally, but at an intensity in America (in hours of usage per day) that is still low as a fraction of overall working hours. For adoption to lag behind innovation is not surprising, because it takes time for people and companies to adapt habits and workflows to new technologies. Adoption is also hampered by the fact that much knowledge is tacit and organisation-specific, data may not be in the right format and its use may be constrained by regulation. Similar constraints were in place a century ago, when factories were electrified: doing so took decades, because it needed a total rethink of floor layouts, processes and organisational structures.

Moreover, constraints on the pace of AI innovation itself may be more significant than they seem, argues the paper, because many applications (such as drug development, self-driving cars or even just booking a holiday) require extensive real-world testing. This can be slow and costly, particularly in safety-critical fields

that are tightly regulated. As a result, economic impacts “are likely to be gradual”, the authors conclude, rather than involving the abrupt automation of a big chunk of the economy.

Even a slow spread of AI would change the nature of work. As more tasks become amenable to automation, “an increasing percentage of human jobs and tasks will be related to AI control.” There is an analogy here with the Industrial Revolution, in which workers went from performing manual tasks, such as weaving, to supervising machines doing those tasks—and handling situations machines could not (like intervening when they get stuck). Rather than AI stealing jobs wholesale, jobs might increasingly involve configuring, monitoring and controlling AI-based systems. Without human oversight, Messrs Narayanan and Kapoor speculate, AI may be “too error-prone to make business sense”.

That, in turn, has implications for AI risk. Strikingly, the authors criticise the emphasis on “alignment” of AI models, meaning efforts to ensure outputs align with their human creators’ goals. Whether a given output is harmful often depends on context that humans may understand, but the model lacks, they argue. A model asked to write a persuasive email, for example, cannot tell if that message will be used for legitimate marketing or nefarious phishing. Trying to make an AI model that cannot be misused “is like trying to make a computer that cannot be used for bad things”, the authors write. Instead, they suggest, defences against the misuse of AI, for example to create computer malware or bioweapons, should focus further downstream, by strengthening existing protective measures in cyber-security and biosafety. This also increases resilience to forms of these threats not involving AI.

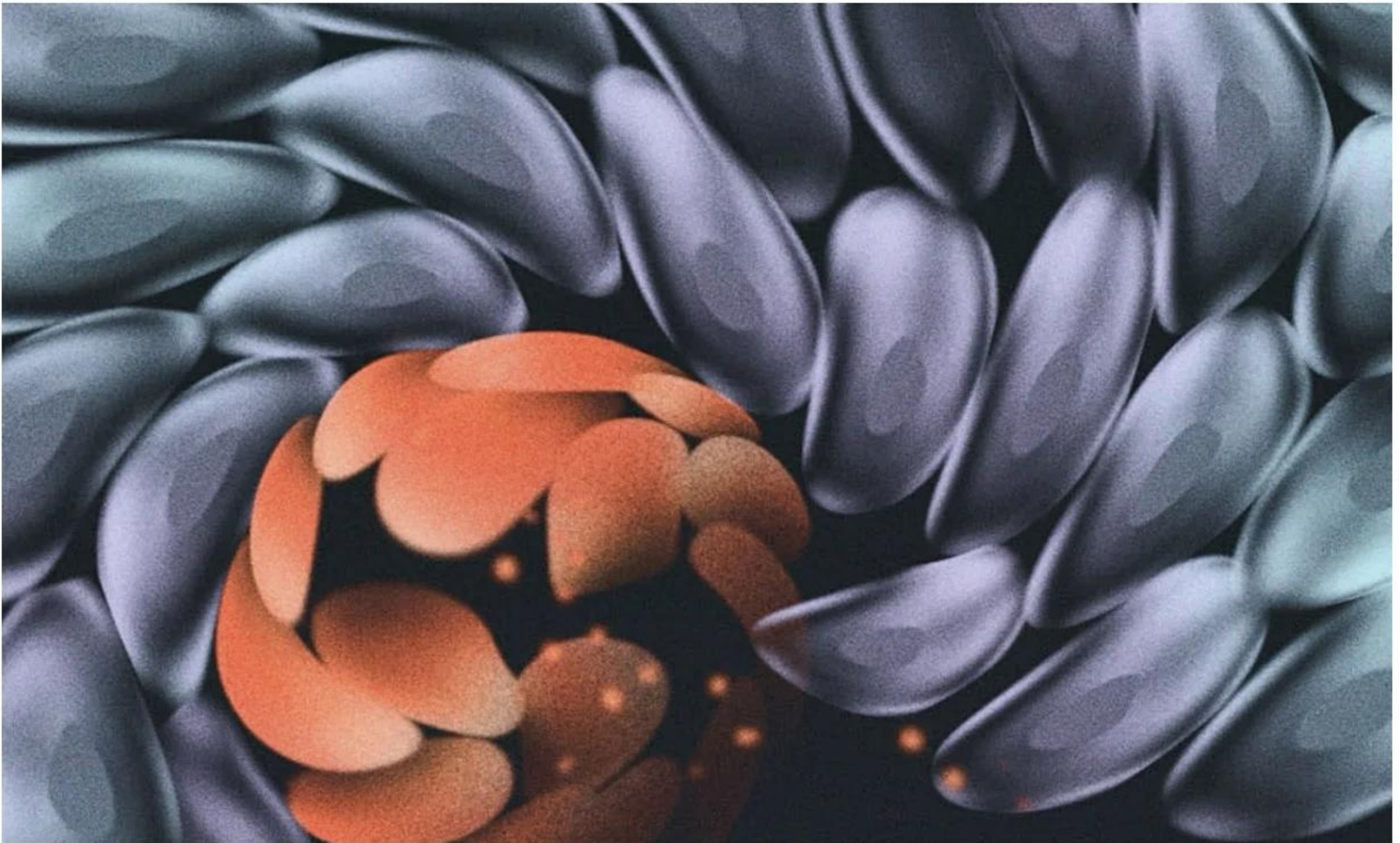
Terminator is fictional

Such thinking suggests a range of policies to reduce risk and increase resilience. These include whistleblower protection (as seen in many other industries), compulsory disclosure of AI usage (as happens with data protection), registration to track deployment (as with cars and drones) and mandatory incident-reporting (as with cyber-attacks). In sum, the paper concludes that lessons from previous technologies can be fruitfully applied to AI—and treating the technology as “normal” leads to more sensible policies than treating it as imminent superintelligence.

The paper is not without its flaws. At times it reads like a polemic against AI hype in general. It is rambling in places, states beliefs as facts and not all of its arguments are convincing—though the same is true of utopian and dystopian screeds. Even AI-pragmatists may feel the authors are too blasé about the potential for labour-market disruption, underestimate the speed of AI adoption, are too dismissive of the risks of misalignment and deception, and complacent about regulation. Their prediction that AI will not be able to “meaningfully outperform trained humans” at forecasting or persuasion seems oddly overconfident. And even if the utopian and dystopian scenarios are wrong, AI could still be far more transformative than the authors describe.

But many people, on reading this rejection of AI exceptionalism, will nod in agreement. The middle-ground view is less dramatic than predictions of an imminent “fast take-off” or apocalypse, so tends not to receive much attention. That is why the authors think it worthwhile to articulate this position: because they believe that “some version of our worldview is widely held”. Amid current worries about the sustainability of AI investment, their paper makes for a refreshingly dull alternative to AI hysteria. ■

Science & technology



Oncology

How tumours begin

Encouraging the growth of healthy cells may prevent the spread of cancerous ones

IN THE POPULAR imagination, cancer starts with a mutation in the DNA of a normal cell. That mutation allows the cell to multiply uncontrollably, circumventing the body's usual quality-control checks. Eventually, a tumour forms and breakaway cells spread to other parts of the body.

But in the past few years scientists have been finding something surprising—so-called cancer-driver mutations are also common in healthy tissue. Such mutations appear in around a quarter of healthy skin cells. When a person is middle aged more than half the surface of the oesophagus and nearly 10% of the lining of the stomach is covered by cells with cancer-driver mutations. These populations of cells have also been confirmed in many other tissues, including the colon, lungs and ovaries.

Why these cells, which are primed to become cancerous, do not grow into tumours is a mystery that scientists are now starting to solve. It seems that cells with

faulty DNA can be prevented from growing into full-blown cancers through the activity of healthy cells around them with beneficial mutations in their DNA. Encouraging those healthy cells to grow could become an effective strategy for stopping cancer.

This new conception of cancer comes from a better understanding of normal tissue growth. As cells divide, each daughter cell is born with a unique set of random genetic mutations. On the outermost layers of organs such as the oesophagus, skin and stomach, those best adapted to their environments push out the rest, which are then shed from the tissue.

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Cancerous cells can also be outcompeted. In mice, cells possessing specific mutations have been shown to displace neighbours carrying mutations that are known to increase the risk of cancer, as well as tiny tumours with fewer than 100 cells. This competition for resources may play out over years. Even though cancer-driver mutations often occur early in life, blood samples taken from people as they age have shown that the number of cells with these mutations—including those that progress to cancer—waxes and wanes over time. Boosting cells with beneficial mutations, therefore, may be a way to prevent cancer.

Cellular warfare

One way to boost such cells may be to learn from their adversaries. A common cancer-driver mutation occurs in *PIK3CA*, a gene known to regulate cell growth and survival that can, when mutated, cause tissue overgrowth. Phil Jones, a researcher at the Wellcome Sanger Institute in Britain, and his group discovered that cells with cancer-driving mutations in *PIK3CA* undergo metabolic changes which help them outcompete non-mutated cells.

In trials involving mice, the results of which were published in August 2024 in *Nature Genetics*, Dr Jones and his team found that a common diabetes drug called metformin introduced the same metabolic

► change in non-mutated cells within the oesophagus. By levelling the arms race between unhealthy and healthy cells, metformin was able to halt the growth of cells with PIK3CA mutations. Conversely, when mice were fed a high-fat diet, troublesome cells thrived. They were also more numerous in people with obesity, suggesting that interventions targeting the condition could prevent oesophageal cancer.

These results are promising. But putting together a comprehensive list of harmful and beneficial mutations is a challenge. For one thing, the human (or, indeed, murine) body possesses thousands of different cell types, each with a different molecular machinery suited to its role. One mutation on a different gene found to reduce the risk of cancer in the human oesophagus, for example, has been shown in other studies to have no such effect on the skin.

Untangling these complications requires extensive laboratory testing. Fortunately, techniques to do that are improving all the time. Just five years ago, testing the role of a specific gene variant involved breeding mice in which that DNA had been artificially modified—a process which could take years. Researchers nowadays use CRISPR, a gene-editing tool, to modify specific sites on the DNA sequence of a single cell. Dr Jones says that “We can look at 15,000 genes in three months,” of which only the 20 or 30 genes of interest are subjected to further study.

The root of the problem

These discoveries help shed light on a more profound question: what causes a harmless cell with faulty DNA to develop into a fully fledged cancerous tumour? External factors are important. Environmental threats such as urban air pollution are known to damage cells and have been linked to higher incidence of cancer. Many chemicals—including some common drinking-water contaminants and ingredients in cosmetics—are also thought to be carcinogenic. But how these carcinogens perform their harmful roles has been more fully understood only recently.

In a study published in 2020 Allan Balmain of the University of California in San Francisco and his colleagues reported that only three of 20 chemicals known or suspected to be human carcinogens actually induced mutations in mice; most appeared instead to promote tumour growth in other ways. This, says Dr Balmain, suggests that 80-90% of carcinogens which people are exposed to may not induce mutations.

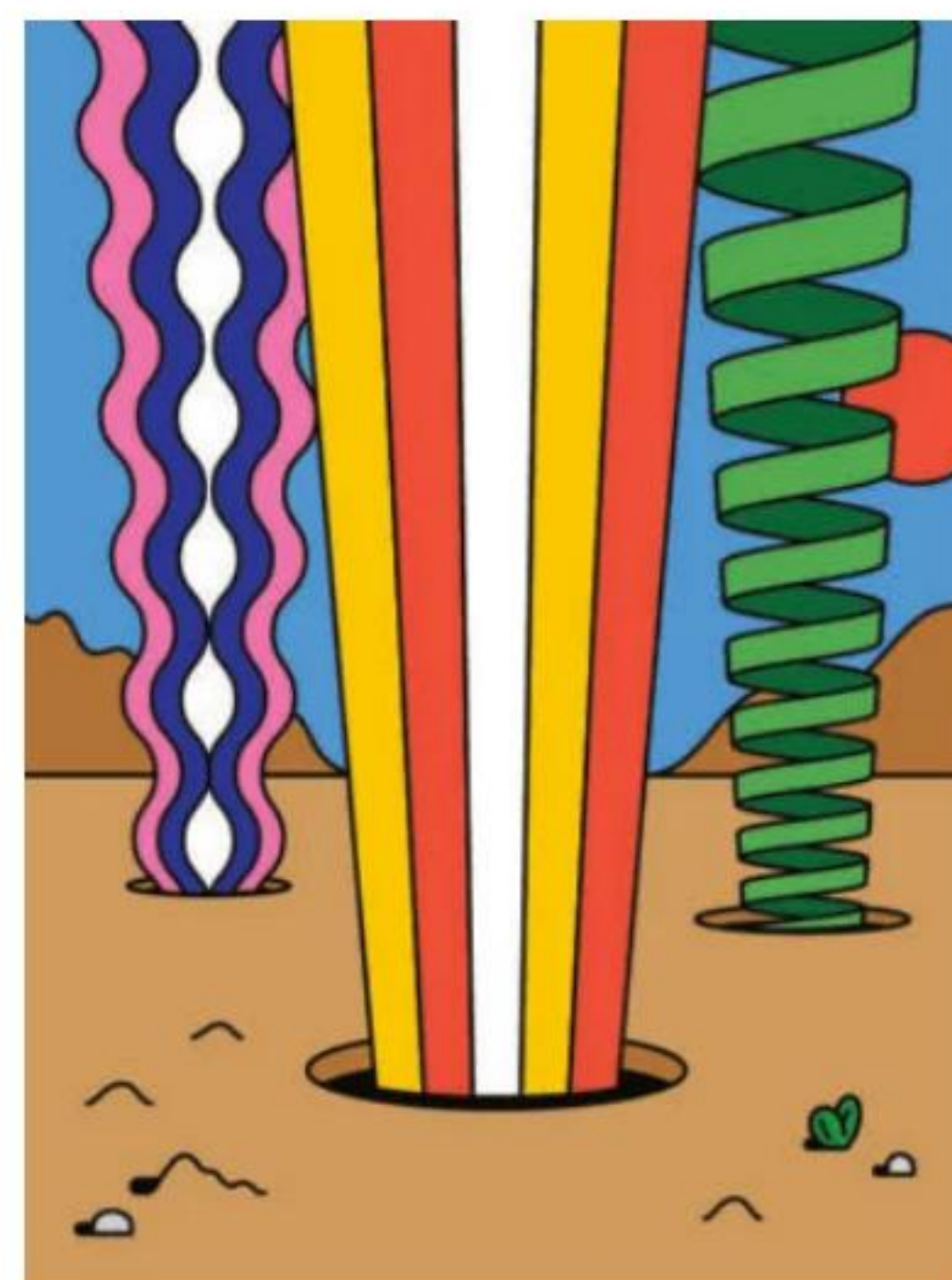
These non-mutagenic carcinogens instead seem to the body's immune system. Frequent exposure can lead to chronic in-

flammation, which in turn encourages cancer-driver cells to develop into full-blown tumours. Inflammation is how the body heals: by dispatching immune cells to the site of an injury, the body can remove irritants, fight infections and trigger the growth of tissue. But when deployed against persistent irritants—such as air-pollution particles in the lungs—inflammation can itself damage the tissue and lead to the formation of tumours. In this sense, tumours have been likened to wounds that never heal.

A study published in *Nature* in 2023, by a research group led by Charles Swanton of the Francis Crick Institute in London, found strong evidence that urban air pollution causes lung cancers in non-smokers. In mice, air pollution led to inflammation in the lungs, which in turn caused surrounding cells with a mutation characteristic of such cancers to grow and form tumours. The researchers estimated that living for as little as three years in a place where there is lots of air pollution (such as near busy roads in a city like London) may be enough to tip such cells into a tumour-growing phase. Chronic inflammation has also been shown to boost the spread of cells with harmful mutations in response to acid reflux, ultraviolet solar radiation and persistent gut infection with certain bacteria, says Marnix Jansen of University College London.

The discovery that chronic inflammation can provide the impetus for cancers to develop is forcing clinicians to rethink their approach to the disease's prevention. Increasingly researchers think that the best way to stop cancers might be to target the immune system instead of cancerous mutations themselves. Identifying which inflammatory molecule to focus on is the first step. In Dr Swanton's study on air pollution and lung cancer, for example, the researchers discovered that an immune-system protein called interleukin-1 β was enabling the inflammation that stoked tumour development. In mice, drugs that blocked interleukin-1 β suppressed the formation of tumours when the animals were exposed to air pollution.

These discoveries suggest that new cancer-preventing drugs might help the body better limit the harm done by its own immune system. This could be game-changing for those with a high risk of developing cancer; a list that includes people with concerning genetic mutations such as faulty BRCA genes, former smokers and people who have already been treated for cancer. Such drugs could also be useful for those with pre-cancerous tissues, such as polyps in the colon or not-yet-malignant lesions in the breasts or lungs. As lifespans grow and the share of people who get cancer continues to rise, the number of potential beneficiaries will grow, too. ■



Nuclear energy

Deep thoughts

BERKELEY, CALIFORNIA

A new suggestion for atomic power involves sticking it underground

SOMETIMES AN IDEA is so elegant that it really deserves to work. One such is a proposal put forward by the boss of Deep Fission, an aspiring nuclear-power firm in Berkeley, California. Elizabeth Muller's brainwave is to build a reactor at the bottom of a mile-deep shaft drilled into Earth's crust, and then fill the shaft with water. This would, in one fell swoop, minimise the risk of radioactive leaks, dispose of the “hot” waste reactors generate and eliminate much of the paraphernalia that make them expensive to build and run.

Most nuclear power stations generate power from pressurised-water reactors (PWRs). The water concerned has two roles: cooling the reactor's core (with the heat thus removed being used to drive steam turbines to generate electricity) and neutron-moderation (slowing down the neutrons released by nuclear fission so that they are more easily captured by other nuclei, causing fission in those as well). To stop this water boiling, however, it has to be kept at high pressure. That requires a pressuriser; a strong pressure vessel to surround the core; and a further containment vessel in case the system springs a leak.

The optimum pressure inside a PWR is approximately 155 times atmospheric pressure at sea level: equivalent to the pressure at the bottom of a column of water 1.6km or (in old money) one statute mile deep. Hence Ms Muller's idea of a stripped-down reactor core at the bottom of a shaft ►►

▶ of such depth, letting the water replace the pressuriser and the surrounding rocks stand in for the containment vessel.

This idea did not come from nowhere. For the past decade Ms Muller has been collaborating with her physicist father Richard, a former academic at the University of California, Berkeley, to run Deep Isolation, a firm that proposes burying reactor waste in deep shafts. About three years ago she realised such an approach could also be applied to the reactors.

Deep Fission's tasks, then, are to design a reactor core narrow enough to fit down a shaft and to drill shafts wide enough to accommodate such cores. Ms Muller's calculations converge on 75cm as being the diameter for which to aim. That is a target reckoned feasible by the firm's (currently anonymous) drilling partner, since wider (and, in at least one case, deeper) boreholes were dug routinely from the 1950s to the 1970s, to accommodate nuclear warheads being tested underground. It is also a realistic size for a reactor core.

Once in place, the buried core would be treated as if it were a source of geothermal power. Water heated by it would be brought to the surface through a pipe in the shaft, used to produce turbine-turning steam, and then returned to the shaft to keep up the pressure. The core itself would be pre-loaded with enough uranium fuel to last for two years, after which another would be lowered on top of it, then another, and so on, for a working life of 50-60 years (the estimated lifetime of the casing of the first core). The shaft would then be pumped dry and sealed with concrete, obviating the waste-disposal problem.

Ms Muller says the firm's engineers are close to completing a preliminary core design and expect to have a fully worked-out version ready for submission for licensing by next year. On August 12th the Department of Energy picked Deep Fission as one of ten firms that will be part of its Nuclear Reactor Pilot Programme, intended to speed up how new designs are tested.

Each unit (borehole plus initial core) will cost about \$30m and produce 15MW of electricity at a cost of 5-7 cents a kWh, which is competitive with other power sources. Ms Muller sees an immediate market serving the power-hungry data centres popping up across America and threatening to destabilise the country's grids. She has already signed a deal with Endeavour, an American data-centre company.

A grid-scale facility would require more holes, but would still be cheaper than an equivalent stand-alone PWR on the surface. With attitudes to nuclear power softening (in America, at least), there has been an efflorescence of ideas for small reactors such as this. Inevitably, many will fail and be quietly buried. For Ms Muller's, though, burial would be just the start. ■

Experimental methods

Better nature

Studies that trade controlled conditions for real-world messiness are all the rage

VISITORS TO MINNESOTA'S state fair in 2024 could hear live music, enjoy white-knuckle rides and compete to make the best tinned goods. They could also get drunk. And if they did, a team of neuroscientists from the local university was waiting to gently torture them.

The researchers were on site to test how well alcohol can numb pain. Although booze's analgesic effect has been understood for centuries, experts did not know if it continued or tailed off with greater consumption. Testing either hypothesis in a controlled trial, where guidelines limit how much a subject can be asked to consume, is difficult. "Ethically, we can't ask people to drink alcohol to levels they do in their day-to-day lives," says Jeff Boissoneault of the Minnesota Alcohol and Pain lab.

That is why he and his colleagues went to the fair. The experiment they conducted, the results of which were published earlier this year in *Addictive Behaviours*, a journal, is an example of a naturalistic study: one freed from the constraints of clinical trials to better simulate day-to-day experiences and behaviours. Such studies are often quicker and cheaper than laboratory trials, and can yield important insights into how people act outside of clinical settings. They have been around for decades, but are currently enjoying a boom in the fields of neuroscience and psychology. The benefits could be felt widely.

Covid-19 is in part responsible for the boom, says Nehal Vadhan, a clinical psychologist at the Feinstein Institutes for Medical Research in New York. "Many labs had to learn how to collect data in a remote fashion, which then naturally leads to a more naturalistic approach," he says.

Researchers are also increasingly making use of real-world data gathered for other purposes. These data-sets, usually collected under naturalistic conditions, are on a scale beyond most controlled trials. In 2024 Dr Vadhan and his colleagues published the results of a naturalistic study that checked how well an online programme reduced problem drinking in more than 46,000 people. After three months, average weekly consumption dropped by a third. Few smartphone and online self-help apps have their claims checked in this way, he notes, and certainly not at such scale.

Fair game

Convenience and size are not the only benefits of naturalistic studies. Scientists are keen to study the effects of all sorts of common behaviour that is unethical or illegal, as well as harmful to health. Dr Vadhan has started a study to collect the experiences of people who take recreational drugs including ecstasy and LSD, which can be done without the permissions and paperwork of a more formal trial.

The Minnesota state-fair study also took advantage of this freedom. Whereas review boards in America typically limit alcohol consumption to the drink-driving threshold of 0.08 grams of alcohol per decilitre of blood, Dr Boissoneault and his colleagues tested 149 people with levels up to 0.15—the point beyond which they felt proper consent was hard to establish. The results revealed pain tolerance rose with ▶▶



Working the crowd

▶ alcohol levels, which will help public-health researchers model how people with chronic pain use alcohol as a self-administered anaesthetic, says Dr Boissoneault.

The study of hangovers is another area ripe for naturalistic studies. One test carried out in the Netherlands, the results of which were published in 2023, studied people after evenings when their blood-alcohol levels were estimated to have risen above 0.2. That is a level associated with severe impairment of hearing, motor skills, speech and vision, and one likely beyond the ethical approval of a review board anywhere in the world. (The study's chief finding was that a fortunate few seem not to experience the negative effects of hangovers no matter how much they drink.)

Yet it is not only intoxicants that are of interest. The neurological effects of more everyday triggers are also being studied. Some researchers are scanning the brains of people as they watch films including "Back to the Future" and "Pulp Fiction", because they are thought to trigger emotional responses that better reflect people's encounters in the real world.

Such studies, which may help paint a better picture of people's emotional and cognitive responses to real-world events, had been considered too uncontrolled to test specific hypotheses, says Chris Buckland, a PhD student in psychology at the University of Queensland. Films build suspense, for example, with a combination of lighting, music, dialogue and facial expressions. In a controlled test of how people respond to suspense, these stimuli would need to be whittled down to just one that could be varied in an experiment.

But, says Mr Buckland, the field is starting to acknowledge that chaos is a part of life. In January he published his own contribution in *Journal of Pain*: a collection of images of people's faces showing pleasure and agony, for use in cognitive research on recognising states of arousal. Unlike many previous efforts that used expressions posed by actors, this database uses pictures captured from YouTube videos and shows real people celebrating, as well as moments they suffer genuine—and therefore impossible to ethically replicate—injuries and emotional distress.

He hopes the new database could be used to train artificial-intelligence models to better recognise pain-related facial expressions in hospitals. If nothing else, it will allow algorithms to grapple with factors such as differing image quality, lighting, colour and viewing angles—wrinkles that would be ironed out of most data-sets. Increasing the experimental realism of a study in this way also introduces noise, says Mr Buckland, which means that more trials and examples are needed than usual to test and prove an idea. The eventual insights, however, might be worth it. ■

Well informed

The truth about seed oils

Forget the scaremongering. They are healthier than common alternatives

THERE ARE many things that fall foul of Robert F. Kennedy junior, America's health secretary, and his vocal supporters. One that really upsets them, and some wellness influencers, is seed oils. In their telling, the oils are "toxic" and can wreck your health. Now some American fast-food chains have swapped the oils for other fats, such as beef tallow or avocado oil, a more bougie option. Is the stuff as bad as they make out?

Seed oils, usually called "vegetable oils" on food labels, are extracted from corn, rapeseed (canola), soyabean, sunflower and other seeds. Critics worry most about two things. The first is that harmful chemicals used in oil processing may end up in the finished product. The second is the oils' content of omega-6 fatty acids. This particular type of fat, opponents claim, is pro-inflammatory and causes cancer, heart attacks and obesity. On both counts, however, the scientific evidence says otherwise.

It is true that manufacturers use chemicals such as hexane, a solvent that when inhaled can irritate the airways and cause light-headedness, to extract extra oil from the seeds after pressing. But the oil is filtered and heated to evaporate hexane and various other molecules that can give it strong flavours or make it go rancid. The result is the ideal kitchen staple: a cheap, longer-lasting

product with a neutral taste. For the levels of oil ingested by the typical American, any trace hexane that may remain is "toxicologically insignificant", according to an assessment published in April by the federal government.

Nor is it clear that the omega-6 fatty acids cause inflammation. A chief concern for seed-oil opponents is that linoleic acid, the main omega-6 fat in seed oils, can turn into inflammatory compounds in the body. Yet linoleic acid is also broken down into some anti-inflammatory compounds, says Thomas Sanders, an expert on dietary fats at King's College London. That makes it hard to work out whether it is pro- or anti-inflammatory overall.

It is better, then, to look at the net effects of consuming omega-6 fats. In randomised trials, increasing participants' consumption of linoleic acid had no effect on inflammatory markers in their bodies. There are also clear benefits: seed oils are high in healthy polyunsaturated fats, meaning that choosing them over saturated fats like butter lowers cholesterol levels, which cuts the risk of heart attacks.

Long-term observational studies reach equally reassuring conclusions. A recent one in *Nature Medicine* looked at 100,000 American health professionals. It found that those following diets high in vegetable oils lived longer, healthier lives than those whose diets were low in vegetable oils (and who might have replaced them with more unhealthy, saturated fats). A round-up of earlier such cohort studies, published in 2022 by the World Health Organisation, found that higher intake of omega-6 fats was linked with lower mortality.

In short, seed oils are unlikely to cause harm—in fact, they are probably good for you, especially if they are consumed in moderation and supplemented by other, healthy fats such as the omega-3s found in fish and walnuts. Overconsumption is usually the consequence of a generally unhealthy diet, full of fried or ultra-processed foods, which there are plenty of other reasons to avoid. Spoon for spoon, seed oils are much healthier than some of the alternatives championed by their critics, not least butter, lard and beef tallow.



Culture



Literacy

The perils of book-spurning

The decline of reading is making politics dumber, scholars fear

THE EXPERIMENT was simple; so too, you may have thought, was the task. Students of literature at two American universities were given the first paragraphs of “Bleak House” by Charles Dickens and asked to read and then explain them. In other words: some students reading English literature were asked to read some English literature from the mid-19th century. How hard could it be?

Very, it turns out. The students were flummoxed by legal language and baffled by metaphor. A Dickensian description of fog left them totally fogged. They could not grasp basic vocabulary: one student thought that when a man was said to have “whiskers” it meant he was “in a room with an animal I think...A cat?” The problem was less that these students of literature were not literary and more that they were barely even literate.

Reading is in trouble. Multiple studies

in multiple places seem to be showing the same thing. Adults are reading less. Children are reading less. Teenagers are reading a lot less. Very small children are being read to less; many are not being read to at all. Reading rates are lower among poorer children—a phenomenon known as “the reading gap”—but reading is down for everyone, everywhere.

In America, the share of people who read for pleasure has fallen by two-fifths in

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20 years, according to a study published in August in *iScience*, a journal. YouGov, a pollster, found that 40% of Britons had not read or listened to any books in 2024. Reading for displeasure is little better: as Sir Jonathan Bate, an English professor at Oxford University, has said, students “struggle to get through one novel in three weeks”. Even the educated young, another greybeard said, have “no habits of application and concentration”.

Such laments should be treated with caution: almost the only thing bookish sorts love more than books is complaining about books and reading. They always have done: the greybeard above was Dickens in, ironically, “Bleak House”. Almost as soon as people stopped fretting about the arrival of reading—Socrates feared it would “produce forgetfulness” in those who used it; Ecclesiastes says that “of making many books there is no end”—people started fretting about its decline. As Ecclesiastes also says, “there is nothing new under the sun”.

Arguably, however, what is happening now is new. It is not just that people are reading less, though they are; the texture of what is being read is changing, too. Sentences are getting shorter and simpler. We analysed hundreds of *New York Times* bestsellers and found that sentences in

popular books have contracted by almost a third since the 1930s.

Open the Victorian bestseller “Modern Painters” by John Ruskin and you will find that its first sentence is 153 words long. It contains the stern advice that you should not trust the “erroneous opinion” of the public and includes a subheading that reads: “Public opinion no criterion of excellence”. Open Amazon’s current non-fiction bestseller, “The Let Them Theory” by Mel Robbins, and you will find that its first sentence is just 19 words long. A subheading reads “How I Changed My Life”. Among its stern advice is that, to get things done, you should count backwards like NASA at a rocket launch because, “Once you start the countdown, 5-4-3-2-1, there’s no turning back.” This is a reminder that Ruskin knew a thing or two.

Smartphones are blamed for dwindling reading habits—and certainly the number of distractions has increased. But reading has always been a bother. “A big book”, said Callimachus, an ancient Greek poet, “is a big evil.” This is particularly true after lunch. You sit down to read then, as one writer noted, the sun streams in, the day feels “50 hours long”, the reader “rubs his eyes” then finally places the book “under his head and...falls into a light sleep”. Given that that particular reader was a fourth-century monk and ascetic he was probably not distracted by Snapchat.

Mark my words

So it is not merely that distractions have increased: the sheer desire to read seems to have declined. In the Victorian era, self-improvement societies flourished. In the Scottish hills, shepherds “maintained a kind of circulating library”, writes Jonathan Rose in his magnificent book “The Intellectual Life of the British Working Classes”. Each shepherd left books in the cranies of walls for other shepherds to read. In Victorian mill towns, workers saved up to buy books. In one Scottish locale, a boy noticed a ragman reading a book. The book—which the ragman lent him—was Thucydides. The boy was Ramsay MacDonald, who would go on to become Britain’s first Labour prime minister.

Today that zeal for personal advancement has diminished. Some blame the high cost of books and closing of libraries for modern intellectual apathy—but books have never been cheaper. In Roman times, a book cost three-quarters of a camel (ie, a lot). In the Victorian era, a copy of Lord Byron’s “Childe Harold’s Pilgrimage” cost a labourer about half a week’s income. And yet, by the end of the 18th century, literacy rates among Scotland’s autodidacts were among the highest in the world. Today “Childe Harold’s Pilgrimage” is free on Kindle, and readers can find plenty of other books that cost less than a coffee.

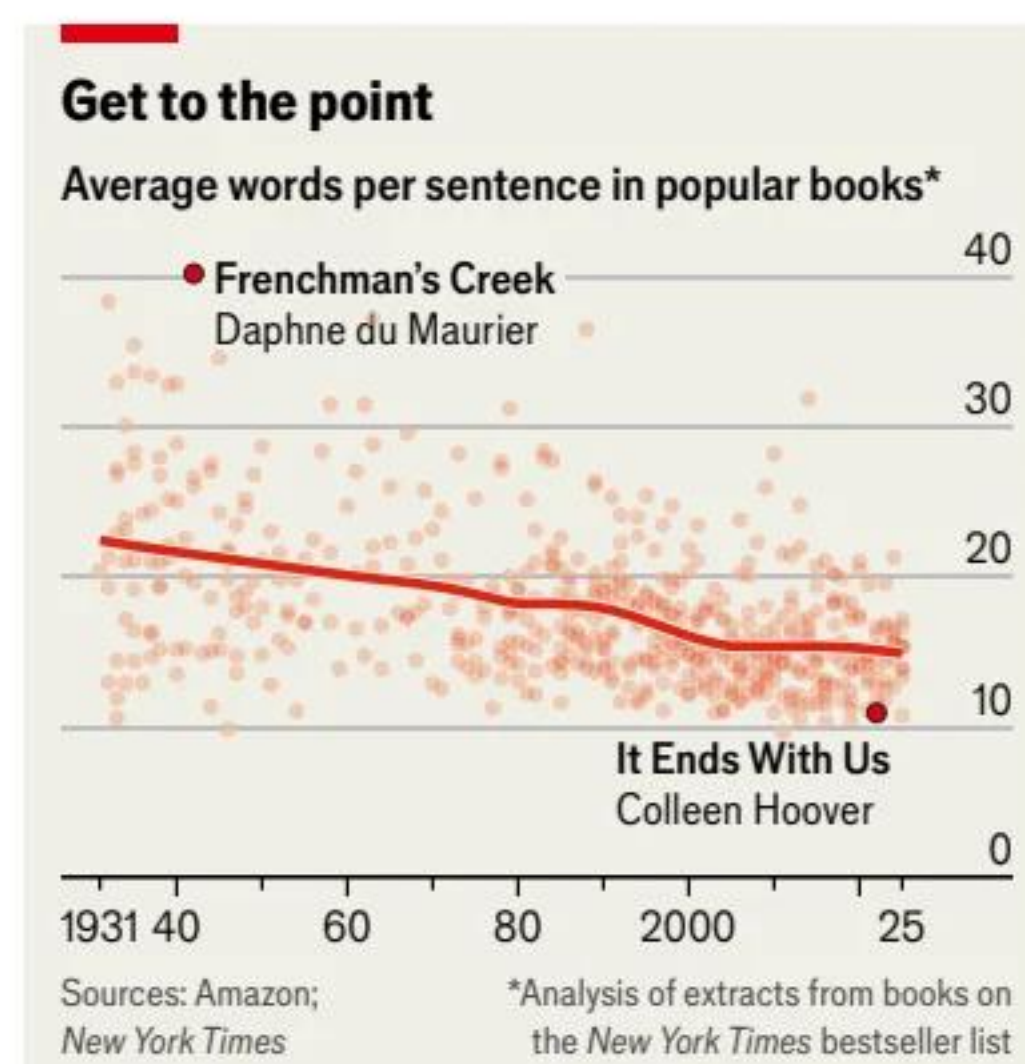
But reading rates keep falling.

A blunter explanation is that people just cannot be bothered. Professor Bate got everyone in a bate with his comments about students not reading: saying such things, he admits, might seem “old fogeyish”. Speak to professors, however and they all lament their students’ waning attention spans. When Professor Rose began teaching, he taught “Bleak House”. He would not attempt it today, he says, partly because of “constant pressure” from university deans to “assign less and less and less reading” and partly because “students simply won’t read it”. In multiple surveys young people describe reading as “boring” and “a chore”.

It is possible to say: who cares? English professors may well lament a fall in literacy, but that may be simple self-interest: less a concern about a declining custom than a declining number of customers. Yet literacy affects more than university reading lists. For one thing, increasing literary sophistication seems to lead to increasing political sophistication. At its simplest, Athenians in the fifth century BC could begin to practise “ostracism”—voting to banish people by writing their name on *ostraka*, scraps of pots—because, as William Harris, an academic, points out, they had achieved “a certain amount of literacy”.

By contrast, decreasing literary sophistication may lead to decreasing political sophistication. Our analysis of Britain’s parliamentary speeches found that they have shrunk by a third in a decade. We also analysed almost 250 years of inaugural presidential addresses using the Flesch-Kincaid readability test. George Washington’s scored 28.7, denoting postgraduate level, while Donald Trump’s came in at 9.4, the reading level of a high-schooler.

This is not inherently a bad thing. Often simple prose is good prose, and few people have ever wished politicians’ speeches to be longer. Professor Bate is more pessimistic. Lose the ability to read complex prose and he fears you may also lose the ability to develop complex ideas



that “allow you to see nuance and to hold two contradictory thoughts together”. The medium is the message, and the message is currently 280 characters long. (“Bleak House”, by contrast, weighs in at around 1.9m characters.)

There will be other losses from a reading decline. Few engines of social mobility are more effective than reading: just ask the Scottish shepherds. Rich children may do it more, but reading is an egalitarian invention. No one—not your nanny, not your tutor, your friends or your posh school—can impel you to devour a book except you. Reading is not merely a tool: it is also one of life’s great pleasures, as Dickens knew well. As Joe, the kind blacksmith in “Great Expectations”, says: “Give me a good book...and sit me down afore a good fire, and I ask no better.” Once people forget that, things really will feel bleak. ■

Mother-daughter memoirs

There’s something about Mary

Mother Mary Comes To Me.

By Arundhati Roy. Scribner; 352 pages; \$30. Hamish Hamilton; £20

IT HAS BEEN nearly three decades since Arundhati Roy’s vivid, poetic novel “The God of Small Things” won the Booker, Britain’s most prestigious literary prize. Back in 1997, after the cold war and before September 11th, the West basked in its supremacy and India was more widely known for tropical exoticism than Hindu nationalism, writing a hit literary novel could propel its author to global fame.

The world has since changed markedly, but Ms Roy has not. She rejected a lucrative career churning out pretty novels to become one of the foremost polemicists of the 21st century. She has spoken out against India’s nuclear testing, supported Kashmiri independence, fought a megadam in the western state of Gujarat, denounced American wars in Afghanistan and Iraq and has staunchly opposed Hindu nationalism. Now 63 years old, she remains fiercely independent.

For that independence, and for much else, Ms Roy credits Mrs Roy (as she refers to her mother), whose name adorns the title of her first memoir, “Mother Mary Comes To Me”. Mary Roy was a “dreamer, warrior, teacher”, as her gravestone put it. She dreamed of a world where women could be equal to men. She fought, all the way to India’s Supreme Court, for equal inheritance rights for the women of her com-

community, and won. And she was a teacher, building a successful school in her home state of Kerala and instilling her values in her pupils.

Mary was also a terror. She behaved abominably towards her staff, her relatives and, especially, her own children, who “had to absorb much of her darkness”. At the age of 18, two years into architecture school in Delhi, Ms Roy stopped returning home. Mother and daughter would not see each other again for seven years. When their relationship at last resumed, it was no less fractious, and it remained so until the very end.

But that period apart was, perhaps, an inoculation against a more permanent separation. It was also when Ms Roy embarked on the long path that would turn her into the writer, essayist and fighter she became. “I am grateful for that gift of darkness,” she writes. “It turned out to be a route to freedom, too.”

Winning that freedom required long periods of hand-to-mouth living. Eventually, she met her husband, with whom she would make films and build a happy family. Writing scripts for British producers supported her through four years of writing “The God of Small Things”. It was only with the book’s success, when Ms Roy was 36, that she found financial stability.

With money came physical comfort, but also deep spiritual discomfort about being so well-off in a country still filled with injustice and poverty, and about becoming the sort of privileged, insulated, upper-class Indian she had once laughed at. And so, with the cushion of royalty payments and the independent streak inherited from Mary, she remained her own person, using her talents and tenacity to fight for the causes she believed in. That has not been easy. In 2002 India’s supreme court

found her guilty of contempt for criticising the judiciary. Last year, Narendra Modi’s government approved her prosecution under anti-terrorism legislation for comments she made about Kashmir 15 years ago (no action has yet been taken).

Ms Roy’s facility with words is undisputed. By writing about herself, her mother and her life—all of which she sees alongside the wider social and political currents of the day—she brings a touch of lightness to weighty concerns, including child abuse and sexual harassment. At times, the memoir feels like the best kind of fiction, veering into magical realism. “But no”, she writes, “it was pretty much the only kind of realism I knew.” For the reader, the magic lies in discovering the extraordinary relationship between two extraordinary women, and how it shaped one of the world’s best writers. ■

American sports

Lonely at the top

American Kings: A Biography of the Quarterback. By Seth Wickersham. *Hyperion Avenue*; 416 pages; \$29.99 and £26.99

NO POSITION IN team sports carries as much pressure and responsibility as the quarterback in American football. They direct every offensive play, which means they must know their team’s entire playbook. Most of the highest-paid players in America’s National Football League (NFL) are quarterbacks; often 20-25% of a team’s wages go to their quarterback.

Signing the right quarterback is one of the most important decisions a team must make. Before the league’s annual player draft, squads will sift through piles of reports, profiles, tests and interviews. But Seth Wickersham, a journalist at ESPN, argues that “no scouting processes have cracked the code, or even clarified it”. He reckons that most of the 69 quarterbacks chosen in the draft’s first round since 2000 have been failures.

In “American Kings”, Mr Wickersham analyses what it takes to be successful in such a singular role. He profiles some of the best quarterbacks, such as Bob Waterfield, who popularised football in Los Angeles; and Johnny Unitas, the son of Lithuanian immigrants who became “the first truly great [quarterback] to come out of nowhere”. Mr Wickersham spends time with his childhood hero, John Elway, who helped the Denver Broncos win two Super Bowls (after three losses earlier in his ca-

reer), and follows three young contenders through the quarterback-industrial complex, from school, to college, to the.

One of these prospects is Colin Hurley, a 15-year-old. His dad, Charlie, is unusually enlightened for the father of a sport prodigy, and the pair appear to have a sweet rapport. In a telling moment, both are aghast as they watch a Netflix documentary about high-school quarterbacks in which a father tears his son to shreds after poor play. Colin trains endlessly, and does little else. Mr Wickersham observes that he leads “a fiercely limited existence in the hopes of an expansive life”.

College football is an extended apprenticeship for the. It is also where a great winnowing takes place: around 16,000 boys play quarterback in high school, but just 860 start in college. Would-be quarterbacks pick their destinations carefully, and colleges compete to attract the best. Mr Elway recalls receiving a postcard from the cheerleading squad at the University of Missouri, informing him: “We don’t sleep with teddy bears. We only sleep with Missouri Tigers.” (He went to Stanford.)

As the sport has become increasingly guided by statistics, the tolerance for mistakes, and even quirks, has shrunk. Football has “never seemed less real, less instinctive, less open to improvisation”, Mr Wickersham writes.

“American Kings” argues that quarterbacks pay a high price for their fleeting moments of glory. Few of those who make it to the summit are able to fully appreciate the view. Steve Young, a three-time Super Bowl winner, says that being around other elite quarterbacks felt deflating “because I wasn’t quite as far along as I thought I was”. When Mr Elway finally wins the Super Bowl, his principal emotion was not joy but relief.

Unsurprisingly, life in retirement does not come easily either. “Everyone with the luxury of myopically pursuing their dreams, and then succeeding, faces a transition into a less-selfish version of adulthood,” Mr Wickersham diagnoses. There is a lot of drink, drugs and infidelity. These vices are common across sports, but Mr Wickersham contends that quarterbacks are particularly vulnerable. They have “a deep and urgent imperative to dominate. Interactions with old friends, with accountants and business partners, with girlfriend and wives, are every bit as geared toward filling some bottomless hole in their personality as is calling a play.”

This is Mr Wickersham’s sad conclusion. He sets out hoping to learn how these men can repeatedly execute a spot-perfect 60-yard spiral pass. He finds that this is the teachable bit that they will eventually commit to muscle memory. The trickier part is how to cope with everything outside the straight lines of the gridiron. ■



It’s alright ma: I’m only writing

Animated films

K-pop goes the record

Netflix's most-watched film ever features a girl band battling demons

“WE’RE GOIN’ up, up, up, it’s our moment,” sings Rumi, the purple-haired lead vocalist of Huntrix, a girl group, as the crowd roars. Rumi and her two bandmates star in “KPop Demon Hunters”, an animated musical film in which Huntrix battle their rivals, the Saja Boys, for higher stakes than just a spot on the pop charts. The boy-band is actually made up of demons disguised as heartthrobs who steal their fans’ souls, which the underworld’s demon king eats. Rumi’s lyrics have proved prophetic. Released on Netflix in June, “KPop Demon Hunters” has become the platform’s most-watched film ever, amassing 236m total views. Three things explain its success.

First, the songs are catchy. Unlike many animated musicals, which feature Broadway-esque show tunes written primarily for children, “Demon Hunters” offers music for adults, with K-pop’s signature hook-heavy style that leaves viewers humming songs for days after watching the film. The soundtrack’s producers include hitmakers for K-pop bands such as Blackpink and “Golden”, Rumi’s song about “goin’ up”, reached number one on the Billboard Hot 100; other tracks, including “Your Idol” and “Soda Pop”, also hit the charts. Twice, an actual K-pop girl group, covered one of the film’s songs, helping to boost visibility for the fictional Huntrix.

The frenzy has spilled over to cinemas.

On a recent weekend theatres in several Anglophone countries held singalong showings. The film’s soundtrack is also popular on TikTok: fans cover songs and mimic dances from the film, and plenty of people have discovered the film through the songs.

Second, the film’s storyline champions female friendship and self-acceptance. The Huntrix trio eat ramen together, and swoon when they first meet the handsome Saja Boys (in a bizarre sequence, while looking at one of the boys’ abs, their eyes transform first into hearts and then popcorn). Rumi, the central character, is actually half-demon, as evinced by patterns on her skin that she hides from her bandmates. When they discover the truth, they are shocked at first, but eventually come to accept Rumi for who she is. “There’s a wonderful message about striving to become your essential self,” says Mike Gentile, a Los Angeles native who was introduced to the film by his children and has since become a huge fan.

Yet the film’s biggest strength might be how it taps into K-pop’s dedicated fandom. People who really love the film tend to watch repeatedly, boosting streaming numbers, and the story pays homage to their loyalty. The “Honmoon”—a magical protective barrier powered by the souls of people who love Huntrix’s music—is central to the plot. “When you mess with our fans...We need to make it hurt,” declare the protagonists.

The film’s fan scenes eschew stereotypes by featuring older viewers and men alongside young women. “A lot of fans, both in Korea and outside Korea, see themselves in it,” observes Thomas Baudinette, a pop-culture expert at Macquarie University in Sydney. Many more will become fans because of it. ■

American television

Same again, please

“The Paper” is less a spin-off from “The Office” than a clone of it

THE SHIP of Theseus is a thought experiment concerning the nature of change: is a ship that has had every plank replaced still the same ship? “The Paper”, a new comedy series from the producers of the American version of “The Office”, poses a related question. What if, instead of everything, just a couple of planks and most of the crew were replaced, and its name was changed from the *Ship of Theseus* to *Frank’s Boat*. Is it a different craft?

NBC, the network behind both shows, says they are “set in the same universe”, if not the same place. “The Office” focused on a paper company in Scranton, Pennsylvania, whereas the workplace in “The Paper” is a struggling newspaper in Toledo, Ohio. Yet a bit of clunky narrative engineering in the new show’s first episode—as well as Oscar Nuñez’s portrayal of the same character, Oscar, a pernickety accountant—links the two series directly.

The focus on the *Toledo Truth-Teller* leads to some unfortunate romanticisation. The opening credits show newspapers being used to wrap bread, train dogs and cover walls, reminding viewers how embedded they once were in daily life. Then again, radios, fax machines and petrol containing lead were once essential, too. Times change.

Domhnall Gleeson plays a starry-eyed toilet-roll-salesman turned editor-in-chief who likes to rally his troops by holding forth on journalistic principles. Black-and-white clips from 1971 showing a bustling newsroom and a publisher talking high-handedly about “saving democracy” come off as extraneous moralising.

But the larger problem is that the new show is almost wholly derivative of its predecessor. It follows the same fake-documentary format and is also set in a struggling post-industrial small city (signifying to viewers that they are watching a show about “real America” rather than the coasts). The theme song is similarly composed; the humour is similarly cringe-worthily witty. Though the characters are different, the types—and therefore their interactions—are the same.

Tim Key plays a boorish, ambitious corporate lackey, as Ricky Gervais and Steve Carell did previously. (Alas, Mr Key is less funny than either of them.) Sabrina Impaciatore is an older, female, Italian version of Dwight Schrute (Rainn Wilson in the original), an incompetent conniver with no



Demons beware!



► self-awareness. Mr Gleeson and Chelsea Frei, as the paper's star reporter, have the lead romance arc that John Krasinski and Jenna Fischer, as Jim and Pam, did in "The Office", while Ramona Young and Melvin Gregg have the same weird secondary entanglement as Kelly and Ryan (Mindy Kaling and B.J. Novak). The show is intermittently funny. But it is about as surprising as a McDonald's Happy Meal.

Then again, McDonald's sells a lot of Happy Meals and "The Office" has a lot of fans. It was reasonably but not wildly popular when it was on air. At its peak, in its fifth season, around 9m people watched each week; far more people preferred "Two and a Half Men", a pedestrian sitcom about

fatherhood starring Charlie Sheen. But according to Parrot Analytics, a data firm, since Peacock acquired streaming rights for "The Office" in 2021, it has been responsible for more than twice as many subscribers as "Two and a Half Men", and has been among the channel's ten most popular shows this year and last. If "The Paper" can attract even 20% of fans of "The Office", Parrot Analytics says, it will be considered a hit.

"The Paper" may be devoid of novel ideas, but the popularity of franchises, reboots and remakes suggests that viewers crave familiarity. For many fans, a new ship is all well and good—but an old one that does a reliable job is even better. ■

China

Welcome to the machine

A new book argues that China's engineers are its main geopolitical advantage

Breakneck: China's Quest to Engineer the Future. By Dan Wang. *W.W. Norton*; 288 pages; \$31.99. *Allen Lane*; £25

MANY OF THE people who run China are engineers, and it shows. Since the 1980s China has built a motorway network twice the length of America's and a high-speed rail network more than 15 times the size of Japan's. It uses almost as much solar and wind power as the rest of the world combined, and it produces around one-third of the world's manufactured goods.

In his illuminating new book, "Breakneck: China's Quest to Engineer the Future", Dan Wang argues that China is an "engineering state", locked in competition with America, which is run by lawyers. China builds things quickly. America debates endlessly about whether they should be built at all. How did China, a country that was once known mostly for intellectual-property theft and child labour, become a technological powerhouse?

Practice helps. Mr Wang compares engineering prowess to cooking. A chef needs the right equipment, a clear recipe and most important, intuition—the know-how and proficiency that comes only through practical experience. "Ask someone who has never cooked before to do something as simple as fry an egg," Mr Wang writes. "Give him a beautiful kitchen and the most exquisitely detailed recipe and he might still make a mess."

Millions of factory workers and managers across China have spent decades accruing this sort of intuition. As contract

manufacturers of smartphones, consumer drones and other sophisticated electronics, they have built a skilled workforce that powers many of the world's most valuable companies, including Apple, Samsung and China's own Huawei.

This process knowledge is China's big advantage over America, argues Mr Wang, who was born in China, migrated to America and has worked in both countries. Xi Jinping, China's president, has declared, "The real economy is the basis of everything...so we must never deindustrialise." Chinese manufacturing leads the world in numerous sectors: clean technology, ultra-



Could a lawyer build this?

high voltage transmission, high-speed rail and 5G networks.

To be sure, America has many success stories, including semiconductors and medical devices. But should the two countries stumble into war, the engineering state may have an advantage. In 2022 China had nearly 1,800 ships under construction; America had five. During fierce fighting, Ukrainian forces fired nearly as many artillery shells every two days as America makes in a month. Even if America achieves artificial general intelligence, Mr Wang notes that algorithms alone cannot win battles—they must be embodied in manufactured drones and munitions.

Still, noting the primacy of engineering in China's global ambitions, though illuminating, does not explain the country's failures. "Breakneck" does not ignore China's big challenges, which include overcapacity, rising debt, environmental destruction and the human cost of living in a state that views "people as aggregates, not individuals". But Mr Wang contends that these stem from the excesses of the "engineering state". In fact they are the consequences of political incentives in China's rigid, top-down authoritarian system.

For example, Mr Wang argues that only an "engineering state" would have allowed Song Jian, a missile scientist, to formulate its notorious one-child policy. His background matters less than the Communist Party's acceptance of his proposal, which, according to Mr Wang, has led to 321m abortions and the sterilisation of 108m women. A proper engineering-based approach might have included cost-benefit analyses and adaptation based on results—precisely what China's top-down political system did not allow.

China's approach to the pandemic is another example. Mr Wang writes poignantly about his three years living under the "zero-covid" policy. He recalls endless intrusive tests and unavailable fever medication. China, Mr Wang posits, was the only country that denied its people ibuprofen, fearful that people might use it to avoid being detected with a higher-than-normal temperature. He calls this "a perfect encapsulation of the engineering state's twisted logic".

It is actually the perfect encapsulation of China's authoritarian system. Who wants to be caught selling contraband fever pills in a police state? What official would risk suggesting to their superiors that people might benefit from painkillers? Fear of political punishment, not engineering prowess, drove these decisions.

The "engineering state" is a useful way to think about industrial competition between America and China. Yet readers seeking to grasp China's governance failures might do better to focus on the "one-party" in "one-party state". ■



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	Gross domestic product			Consumer prices			Unemployment rate			Current-account balance		Budget balance		Interest rates		Currency units	
	% change on year ago latest	quarter*	2025†	% change on year ago latest	2025†	%	% of GDP, 2025†	% of GDP, 2025†	10-yr gov't bonds latest, %	change on year ago, bp	per \$ Sep 3rd	% change on year ago					
United States	2.1	Q2	3.3	1.3	2.7	Jul	2.8	4.2	Jul	-3.9	-5.9	4.2	38.0	-			
China	5.2	Q2	4.5	4.9	nil	Jul	-0.1	5.2	Jul**	1.7	-5.9	1.6	\$	-20.0	7.15	-0.4	
Japan	1.2	Q2	1.0	0.9	3.0	Jul	3.2	2.3	Jul	4.3	-3.4	1.6		69.0	148	-1.8	
Britain	1.2	Q2	1.4	1.0	3.8	Jul	3.7	4.7	May**	-3.0	-4.9	4.7		74.0	0.74	2.7	
Canada	1.2	Q2	-1.6	1.0	1.7	Jul	2.0	6.9	Jul	-0.9	-2.0	3.4		33.0	1.38	-1.4	
Euro area	1.4	Q2	0.5	1.2	2.1	Aug	2.0	6.2	Jul	3.2	-3.3	2.7		47.0	0.86	5.8	
Austria	-0.5	Q1	0.6†	0.1	4.1	Aug	3.0	5.5	Jul	2.3	-4.5	3.0		26.0	0.86	5.8	
Belgium	1.0	Q2	0.7	1.0	2.6	Aug	3.0	5.8	Jul	-0.1	-4.7	3.4		45.0	0.86	5.8	
France	0.8	Q2	1.3	0.6	0.8	Aug	0.9	7.6	Jul	-0.3	-5.7	3.5		56.0	0.86	5.8	
Germany	0.2	Q2	-1.1	0.2	2.1	Aug	2.1	3.7	Jul	5.3	-2.7	2.7		47.0	0.86	5.8	
Greece	1.8	Q1	0.2	2.2	3.7	Jul	2.7	8.0	Jul	-5.9	-0.2	3.5		14.0	0.86	5.8	
Italy	0.4	Q2	-0.3	0.5	1.7	Aug	1.7	6.0	Jul	1.2	-3.6	3.6		-3.0	0.86	5.8	
Netherlands	1.5	Q2	0.4	1.3	2.4	Aug	3.4	3.8	Jul	7.9	-2.4	2.9		36.0	0.86	5.8	
Spain	2.8	Q2	3.0	2.6	2.7	Aug	2.3	10.4	Jul	2.4	-3.2	3.4		24.0	0.86	5.8	
Czech Republic	2.3	Q2	1.8	2.1	2.7	Jul	2.4	2.8	Q2†	0.3	-2.4	4.3		47.0	21.0	8.4	
Denmark	1.3	Q2	5.1	2.5	2.3	Jul	1.8	2.9	Jul	12.2	2.1	2.6		31.0	6.40	5.6	
Norway	-2.1	Q2	3.4	1.1	3.3	Jul	2.8	4.9	Jun**	13.6	9.5	4.0		63.0	10.0	6.6	
Poland	3.4	Q2	3.2	3.1	2.8	Aug	3.7	5.4	Jul§	0.3	-6.1	5.5		nil	3.65	6.3	
Russia	1.1	Q2	na	0.9	8.8	Jul	8.7	2.2	Jul§	2.0	-2.7	13.8		-207	80.9	7.9	
Sweden	1.6	Q2	1.9	1.5	0.8	Jul	2.3	8.0	Jul§	5.7	-1.4	2.6		49.0	9.43	9.4	
Switzerland	1.2	Q2	0.5	1.3	0.2	Aug	0.1	2.9	Jul	6.2	0.5	0.4		-12.0	0.80	6.2	
Turkey	4.8	Q2	6.6	2.8	33.0	Aug	34.2	8.3	Jul§	-1.7	-3.4	30.6		388	41.2	-17.4	
Australia	1.8	Q2	2.4	1.7	2.1	Q2	2.2	4.2	Jul	-1.2	-1.8	4.3		41.0	1.53	-2.6	
Hong Kong	3.1	Q2	1.8	2.4	1.0	Jul	1.5	3.7	Jul**	10.7	-5.3	3.1		12.0	7.80	nil	
India	7.8	Q2	7.4	6.2	1.6	Jul	3.2	6.3	Aug	-0.6	-4.4	6.5		-33.0	88.1	-4.7	
Indonesia	5.1	Q2	5.9	4.7	2.3	Aug	1.6	4.8	Feb§	-1.1	-3.1	6.4		-25.0	16,414	-5.4	
Malaysia	4.4	Q2	5.8	4.1	1.2	Jul	1.7	3.0	Jun§	1.9	-4.0	3.4		-37.0	4.23	3.3	
Pakistan	4.8	2025**	na	4.8	3.0	Aug	3.5	6.3	2021	-1.4	-5.4	12.0	†††	-137	282	-0.9	
Philippines	5.5	Q2	6.1	5.5	0.9	Jul	1.5	4.1	Q2§	-3.3	-5.4	6.1		-2.0	57.3	-1.2	
Singapore	4.4	Q2	5.8	2.8	0.6	Jul	0.9	2.1	Q2	14.4	0.2	1.9		-85.0	1.29	1.6	
South Korea	0.6	Q2	2.7	0.8	1.7	Aug	2.1	2.4	Jul§	3.8	-2.4	2.9		-22.0	1,392	-3.6	
Taiwan	8.0	Q2	12.8	4.5	1.5	Jul	1.8	3.3	Jul	15.7	0.6	1.4		-17.0	30.7	4.5	
Thailand	2.8	Q2	2.4	1.8	-0.8	Aug	0.1	0.7	Jul§	2.0	-5.8	2.1		-48.0	32.3	5.8	
Argentina	5.8	Q1	3.4	5.6	36.6	Jul	39.7	7.9	Q1§	-2.3	0.4	na	na	1,359	-29.9		
Brazil	2.2	Q2	1.5	2.2	5.2	Jul	5.1	5.8	Jun§**	-2.4	-8.1	14.1		194	5.44	3.5	
Chile	3.1	Q2	1.4	2.4	4.3	Jul	4.1	8.7	Jul§**	-2.0	-2.2	5.7		5.0	970	-4.7	
Colombia	2.5	Q2	2.0	2.3	4.9	Jul	4.9	8.8	Jul§	-2.6	-7.3	11.5		161	4,009	4.7	
Mexico	nil	Q2	2.6	0.1	3.5	Jul	3.9	2.6	Jul	-0.1	-3.5	9.0		-72.0	18.7	6.1	
Peru	2.8	Q2	1.8	2.9	1.1	Aug	1.8	4.9	Jul§	2.0	-2.7	6.0		-51.0	3.53	7.1	
Egypt	4.8	Q1	-23.0	4.1	13.9	Jul	15.0	6.1	Q2§	-4.2	-7.7	na	na	48.5	-0.1		
Israel	2.5	Q2	-3.5	2.7	3.1	Jul	3.3	3.0	Jul	2.5	-5.2	4.2		-75.0	3.36	9.8	
Saudi Arabia	2.0	2024	na	4.4	2.1	Jul	2.6	2.8	Q1	-1.8	-2.9	na	na	3.75	nil		
South Africa	0.8	Q1	0.4	1.0	3.5	Jul	3.1	33.2	Q2§	-1.6	-4.9	9.6		43.0	17.7	1.9	

Source: Haver Analytics *% change on previous quarter, annual rate †The Economist Intelligence Unit estimate/forecast §Not seasonally adjusted ¶New series **Year ending June ††Latest 3 months †††3-month moving average §§5-year yield ††††Dollar-denominated bonds Note: Euro-area consumer prices are harmonised

Markets

In local currency	Index	% change on:	
		one week	Dec 31st 2024
United States S&P 500	6,448.3	-0.5	9.6
United States NAS Comp	21,497.7	-0.4	11.3
China Shanghai Comp	3,813.6	0.3	13.8
China Shenzhen Comp	2,380.3	-0.6	21.6
Japan Nikkei 225	41,938.9	-1.4	5.1
Japan Topix	3,048.9	-0.7	9.5
Britain FTSE 100	9,178.0	-0.8	12.3
Canada S&P TSX	28,751.4	1.1	16.3
Euro area EURO STOXX 50	5,325.0	-1.3	8.8
France CAC 40	7,719.7	-0.3	4.6
Germany DAX*	23,594.8	-1.9	18.5
Italy FTSE/MIB	41,784.7	-1.3	22.2
Netherlands AEX	888.3	-2.1	1.1
Spain IBEX 35	14,789.4	-1.5	27.5
Poland WIG	104,459.0	-2.2	31.3
Russia RTS, \$ terms	1,117.3	-2.0	25.1
Switzerland SMI	12,200.0	-0.1	5.2
Turkey BIST	10,737.7	-5.5	9.2
Australia All Ord.	9,010.1	-2.4	7.0
Hong Kong Hang Seng	25,343.4	0.6	26.3
India BSE	80,567.7	-0.3	3.1
Indonesia IDX	7,885.9	-0.6	11.4
Malaysia KLSE	1,578.5	-0.6	-3.9

	Index	% change on:	
		one week	Dec 31st 2024
Pakistan KSE	152,201.9	3.2	32.2
Singapore STI	4,289.3	1.0	13.2
South Korea KOSPI	3,184.4	-0.1	32.7
Taiwan TWI	24,100.3	-1.7	4.6
Thailand SET	1,259.3	0.9	-10.1
Argentina MERV	1,933,986.0	-2.0	-23.7
Brazil BVSP*	139,863.6	0.5	16.3
Mexico IPC	59,651.6	1.7	20.5
Egypt EGX 30	34,762.0	-2.6	16.9
Israel TA-125	3,076.4	-1.8	26.8
Saudi Arabia Tadawul	10,619.1	-1.8	-11.8
South Africa JSE AS	101,514.9	-0.5	20.7
World, dev'd MSCI	4,158.9	-0.5	12.2
Emerging markets MSCI	1,267.0	-0.2	17.8

US corporate bonds, spread over Treasuries		Dec 31st	
Basis points	latest	2024	
Investment grade	96	95	
High-yield	356	324	

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

Commodities

The Economist commodity-price index 2020=100	% change on		
	Aug 26th	Sep 2nd*	month year
Dollar Index			
All items	136.0	136.3	3.9 9.6
Food	149.8	150.0	5.8 11.7
Industrials			
All	124.5	124.9	2.0 7.5
Non-food agriculturals	123.9	124.6	-0.2 -2.2
Metals	124.7	125.0	2.6 10.3
Sterling Index			
All items	129.6	130.7	3.0 7.1
Euro Index			
All items	133.3	133.5	3.0 3.7
Gold			
\$ per oz	3,381.5	3,511.9	3.7 41.6
Brent			
\$ per barrel	67.2	69.2	2.2 -6.6

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

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

OBITUARY

Steve Shirley

The pioneer of jobs for women in tech died on August 9th, aged 91



SHE LEARNED the ropes pretty fast at Computer Developments Ltd. In 1959, she had to. Not so much the coding, with paper and pencil at her desk, until it could be punched up and sent to the computer; to anyone as fond of maths as she was, that was just fun. No, she also learned to stand against the wall in case a male colleague tried to pinch her bottom. And if she wanted to make a sensible point at a meeting, and was bluntly told it was nothing to do with her, she had to silently accept it. The day after that particular slight, however, she handed in her notice and decided to create a company herself. One just for women.

Stephanie Shirley knew exactly what she wanted. A company employing university-educated women, who were otherwise laid off when they got married or became pregnant. A job, coding and inputting data, which they could do from home, with flexible hours and on piecework, to allow for looking after children or elderly parents. A company without the top-down “Do this, jump here” attitude of male bosses, but instead working in teams, eventually with shared ownership. She called it “Freelance Programmers”, and it would sell software.

That in itself caused male sniggering. No one would buy software in 1962; it was given away free with hardware. And of course no one would buy it from a woman. Try again, dear. (You could always recognise ambitious women, she said, because their heads were flat from being patted patronisingly.) Nonetheless, she started her company from her dining table with a mere £6 in capital. By the 1990s, when it was floated, it employed 8,500 people; by 2000 it was valued at \$3bn. Its management-control protocols had been adopted by NATO, and it had programmed the black-box flight recorder for Concorde. As for the woman with her back against the wall, by 2017 she was a dame and a Companion of Honour, both for services to IT and for giving away the fortune she had made.

Much of that success lay in cunning. Because married female graduates were ignored by male employers, she had her pick of the best, all mustard-keen to work, and needing only a telephone to get started. Of 300 employees initially recruited, 297 were women. She disguised the scattered, domestic character of her workforce by offering fixed prices. When male clients called, she played a

tape recording of efficient typing down the line to suggest a busy office, not her kitchen. Wiliest of all, she began to sign off letters to potential clients not as “Stephanie” but as “Steve”. That was her family nickname, one she liked much better, and responses shot up when she began to use it. So did her delight when, having arranged a meeting, she would walk into a room full of men who were expecting a he, not a she. When they had recovered from assuming she had come to make their tea, they increasingly agreed to do business with her.

This was not the first time she had changed her name. Before she married Derek Shirley in 1959, she was Stephanie Brook. But before that she was Vera Buchthal, who had arrived at Liverpool Street station in 1939, five years old and crying for her lost favourite doll, as one of 10,000 mostly Jewish children brought to England from Germany and Austria under the Kindertransport programme. That start in life marked her ever afterwards. Because kind people had saved her, she was going to make very sure that hers was a life worth saving. She would fritter none of it away.

That was why she snubbed the chance of university, though she was so brilliant at mathematics that she had to go to a boys’ school to study it properly. Instead she took a degree in it after six years of evening classes, while she worked at Dollis Hill Research Centre. (Another personal ambition was never to be poor again.) At Dollis Hill she helped devise electronic telephone exchanges and worked on Ernie, the computer that randomly chose the winning holders of Premium Bonds. At CDL she found even more rewarding work, developing software for the ICT 1301, one of the first mass-produced transistor computers. She created and moulded “Flossie” almost as if it were a child.

Coping with a real child, though, could be much more problematic. She seemed to have perfected the brand-new idea of work-life balance (helped, in her case, by a wonderfully encouraging husband). But it rapidly became impossible. Her only child Giles, at first a contented baby, suddenly at two and a half stopped talking and became unmanageable. He was diagnosed as severely autistic. At puberty he developed epilepsy, and became so violent that more than once she considered family suicide. For years she struggled with depression, even as her company boomed.

The tragedy of Giles convinced her that money was no use if it simply sat there. It had to be spread about. Before she retired in 1993 she therefore gave most of her stake in the company to her staff, ultimately making 70 millionaires. With much of the rest she gradually set up centres where autistic young people like Giles could be cared for, understood, even prepared for work, in an atmosphere as loving as she had tried to give him. The first, a supported living centre called Autism at Kingwood, opened in 1994 with Giles as the first resident. He died only four years later of an epileptic seizure, but he was happy there.

Most of her money went to autism causes, including Autistica and the National Autistic Society. But she did not forget her first love, computing. In 2001 she became a founding donor of the Oxford Internet Institute, which was set up to consider its social and ethical implications. Too many people, she believed, were afraid of new tech. She embraced it wholeheartedly, AI and all; so should they. The only thing to fear was wasting time, for who knew what opportunities might open up tomorrow? One day she had been playing in Vienna, the next on a train, the next on a ship to a new land; one day the butt of a roomful of men, the next her own master, undaunted, and climbing to the top of the tree. ■

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