The Economist

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NOVEMBER 22ND–28TH 2025

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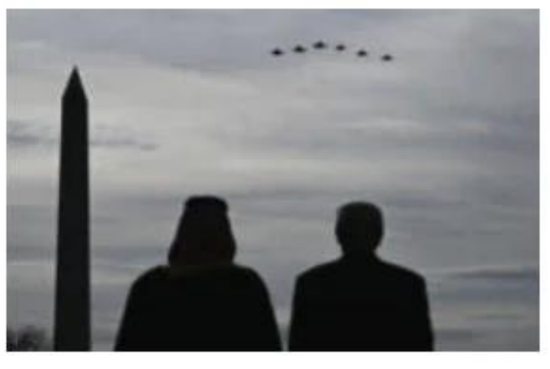

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to take part in *"a severe contest between intelligence, which presses forward, and an unworthy, timid ignorance obstructing our progress."*

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The world this week Politics

Donald Trump signed legislation instructing the Justice Department to release all files relating to **Jeffrey Epstein**, a deceased sex offender and politically connected financier, after Congress voted almost unanimously for it to do so. Republicans supported the bill amid intense pressure from their MAGA base to make the files public. For months Mr Trump had tried to stop the vote from happening, as speculation swirled about whether he knew about Epstein's crimes before falling out with him around 2004 (Epstein was first convicted in 2008).

Summers over

Meanwhile, **Larry Summers**, a treasury secretary under Bill Clinton and a former president of Harvard, said he would step back from public life after it emerged that he had asked Epstein for advice about having an extramarital affair. He has stepped down from the board of OpenAI. Mr Summers used the codename "peril" in his messages to Epstein.

A court in El Paso issued a preliminary injunction to stop the Republicans' map of congressional districts for **Texas** from coming into force, finding it had been "racially gerrymandered". State Republicans have redrawn the boundaries in the hope it will give the party five more seats in Congress in next year's midterms. Texas immediately lodged an appeal with the federal Supreme Court.

Muhammad bin Salman, the de facto ruler of **Saudi Arabia**, visited the White House, his first trip to Washington in seven years. Mr Trump said that America would sell F-35 fighter jets to the Saudis and announced that Saudi Arabia would be formally designated as a major non-NATO ally. The president also insisted that Prince Muhammad "knew nothing" about the murder in 2018 of Jamal Khashoggi, a journalist. In 2021 an American intelligence report said that the prince authorised the killing. He has always denied this.

The UN Security Council voted in favour of Mr Trump's peace plan for **Gaza**, which includes establishing an international stabilisation force there. Hamas rejected the resolution. Binyamin Netanyahu, Israel's prime minister, called for Hamas to be expelled from Gaza, which would go beyond Mr Trump's plan. Meanwhile, Germany resumed arms exports to Israel, saying the ceasefire had stabilised the situation in Gaza. Germany, the second-largest exporter of weapons to Israel, suspended its shipments in August.

The UN registered more than 260 attacks by **Israeli settlers** in the West Bank that led to Palestinian casualties or damage to property in October, the highest monthly count since its records began in 2006.

At least 13 people were killed in an Israeli strike near a Palestinian refugee camp in **Lebanon**, according to the country's health ministry. Israel claimed it was targeting Hamas. Hamas denied it had any "military installations" in the area.

Delegates arrived in South Africa ahead of the first-ever **G20 summit** to be held in an African country. Donald Trump is not attending the gathering in Johannesburg; he accuses South Africa of killing white Afrikaners and stealing their land (there is no such policy). Mr Trump said the country shouldn't be in the G20. America has reportedly warned South Africa not to issue a formal statement at the end of the summit.

Reports emerged that America and **Russia** have drawn up a 28-point peace proposal for **Ukraine**. Firm details of the plan were scant, but it appears to include many of Russia's longstanding demands. Ukraine has yet to comment on it. Earlier, Volodymyr Zelensky met Emmanuel Macron in Paris and signed a letter of intent to buy up to 100 French-made Rafale fighter jets over the next decade. There was no let-up in Russia's barrage of drone and missile attacks. At least 26 people were killed when blocks of flats were struck in Ternopil, a city in western Ukraine.

Poland's prime minister, Donald Tusk, said that two Ukrainians working for Russian intelligence had carried out acts of sabotage on the Warsaw-Lublin railway line. Both suspects had crossed into Poland from Belarus and had returned there, Mr Tusk said. Their goal had been to cause a "rail catastrophe".

They've Kast their vote

The first round of **Chile's** presidential election saw Jeannette Jara, a Communist Party member of the governing coalition, take 27% of the vote, just ahead of José Antonio Kast, an ultraconservative former congressman, who took 24%. Mr Kast is widely expected to win the run-off on December 14th. Crime and immigration have shot to the front of the electorate's concerns in this election, a far cry from the progressive wave that carried Gabriel Boric, the youthful current president, to power in 2021 (Chilean presidents cannot run for two consecutive terms).

At least 100 police officers and 20 civilians were injured in Mexico City during protests against President Claudia Sheinbaum's handling of crime and corruption. Demonstrations took place across **Mexico** and were organised by Generation Z Mexico, the latest in a series of self-styled Gen Z protests that have occurred across the world in countries that are as divergent as Madagascar, Nepal and Peru.

Bangladesh's war-crimes court found Sheikh Hasina, the country's former autocratic prime minister, guilty of ordering the security forces to crack down on student protests that ultimately forced her from office last year. Around 1,400 people were killed during the crackdown. The court sentenced her to death. Sheikh Hasina, who fled to India after she was ousted from power, described the court as "rigged". Bangladesh has asked India for her extradition.

Relations between **China** and **Japan** sank to their lowest point in years following recent remarks by Takaichi Sanae, the new Japanese prime minister, that any attack on Taiwan would also be a threat to Japan. The Chinese government has called on Ms Takaichi to retract the comments and state media have published angry articles denouncing her. Amid the heightened tensions China told its citizens not to travel to Japan. Japan warned its citizens in China to be vigilant when out in public.

Britain's Labour government announced a significant toughening of immigration policy. Shabana Mahmood, the home secretary, said the surge in migration had "destabilised communities" and left taxpayers "footing the bill" for a failed system. Illegal immigration has been a thorny subject in British politics for years, giving rise to the populist-right Reform UK. Its leader, Nigel Farage, said Ms Mahmood sounded like a Reform supporter.

The world this week Business

Nvidia's latest quarterly earnings provided some relief for investors amid the recent drop in tech stocks. The maker of artificial-intelligence chips reported a 62% rise in revenue, year on year, to $57bn, and net profit of $31.9bn, up by 65%. Its share price surged initially in response; the stock has registered tepid growth over the past month. Nvidia's market capitalisation is around $4.5trn, down from $5trn at the end of October.

Stockmarkets have struggled amid worries about share prices being overvalued for companies that are riding the AI boom. Oracle has shed about 30% of its value since September, which was when it reported a surge in contracts for its cloud services and announced a big deal to supply OpenAI with data-centre capacity. The stocks of tech giants such as Amazon, Meta and Palantir have all fallen since the start of November.

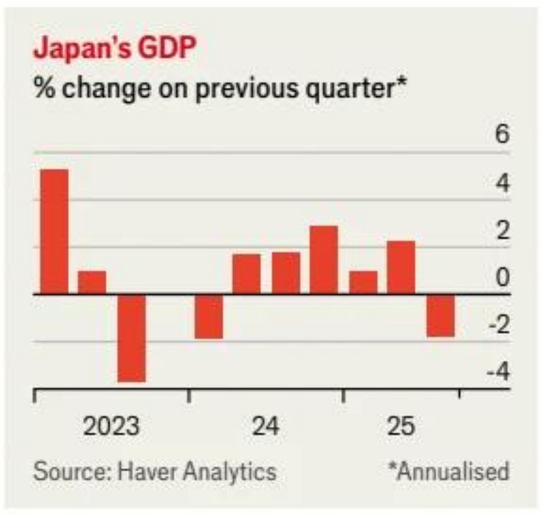
Cryptocurrencies have also been plunging amid a sell-off in speculative assets. The price of bitcoin reached a record $126,000 in October but was trading around $92,000 this week. Around $1.2trn has been knocked off the value of crypto assets over six weeks.

Investors were also nervously assessing earnings from America's big retailers. **Home Depot** reduced its forecast of annual profit for the year, blaming economic uncertainty among consumers that is dampening demand for home-improvement supplies. **Target** also lowered its guidance, as sales at the troubled retailer stagnated.

A federal judge in Washington ruled that **Meta's** acquisitions of Instagram and WhatsApp did not contravene antitrust law, a blow to the Federal Trade Commission, which launched the case five years ago. The judge found that whether or not Meta enjoyed a monopoly in the past, the government had failed to prove that it did so today. During the trial earlier this year Meta had called witnesses from other social-media companies, including TikTok, to describe the fierce competition in the industry.

Xiaomi the money

The rising cost of memory chips will push up the prices that consumers pay for smartphones, warned **Xiaomi**. Memory-chip costs are increasing in part because of the huge demand for their use in AI servers. The Chinese tech company reported a 22% year-on-year jump in revenue for the latest quarter, and a 150% surge in operating profit. Sales at its electric-vehicle business were up by 198%.



Japan's economy shrank by 1.8% on an annualised basis in the third quarter, the first contraction since early 2024. A drop in exports, notably car parts that have been hit by America's tariffs, dragged down growth, but household consumption remains weak amid rising prices.

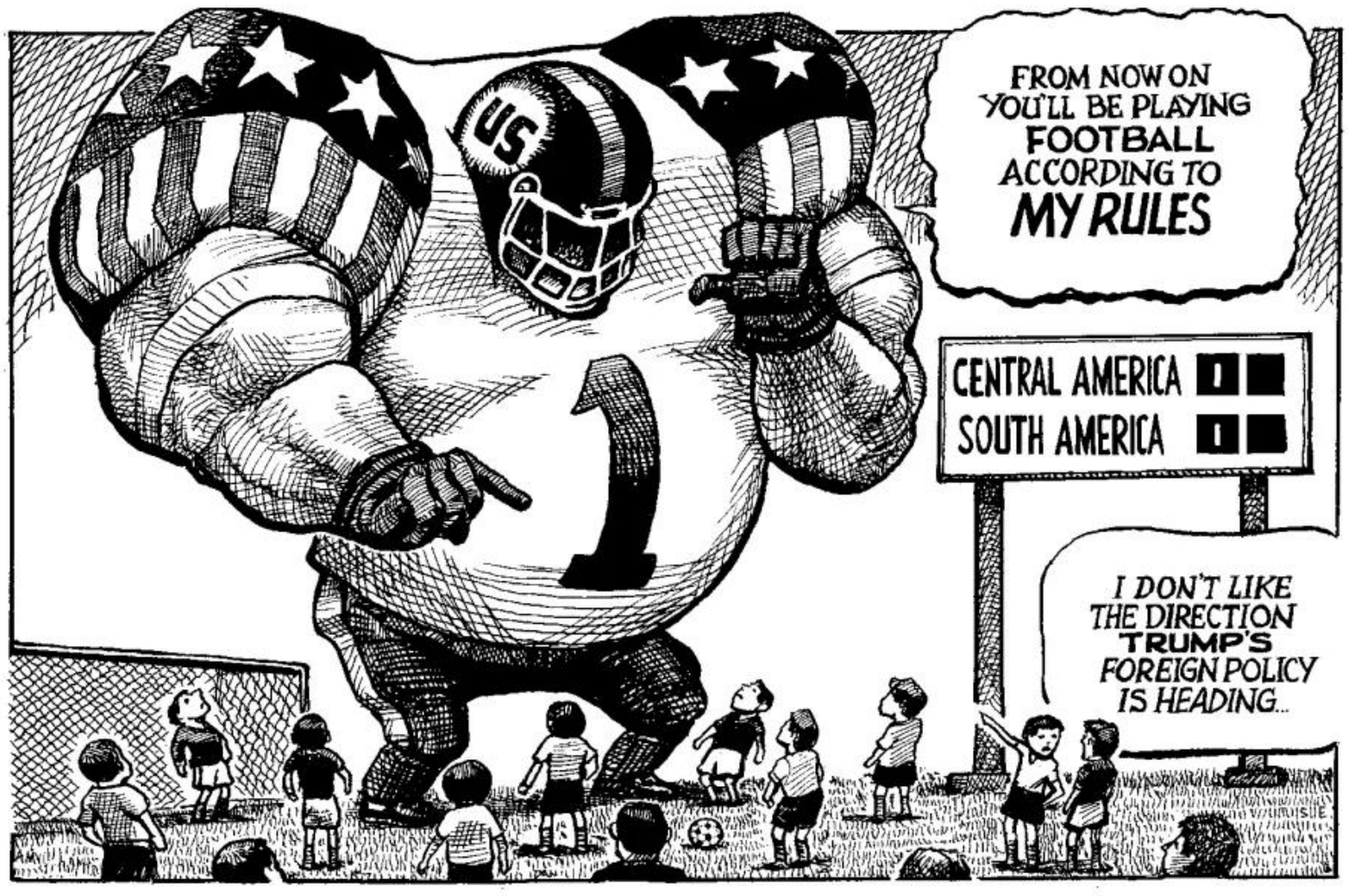
The Trump administration reached a framework trade agreement with **Switzerland** that will reduce tariffs on Swiss imports from 39% to 15%. Swiss companies are to invest $200bn in America, including $50bn from Roche and $23bn from Novartis. Jamieson Greer, the US trade representative, said the deal would help America reduce its "deficit in pharmaceuticals and other key sectors". Guy Parmelin, the Swiss economy minister, rejected criticism at home about the deal. "We haven't sold our soul to the devil", he insisted.

BHP said it would appeal against a ruling from the High Court in London that found it liable for the failure of a **dam in Brazil** in 2015 that killed 19 people and affected hundreds of thousands of others whose communities were destroyed or contaminated by the cascading sludge. The ruling means hearings can begin into what compensation the mining firm might pay. BHP points out that it has already entered a remediation and compensation agreement in Brazil along with Vale, its joint partner in the Fundão dam, and that the action taken in the English courts duplicates that effort.

Britain's annual inflation rate fell to 3.6% in October from the 3.8% it had held steady at for the previous three months. Services inflation, of which the Bank of England takes particular note in its deliberations on interest rates, dropped to 4.5% from 4.7% in September. Although inflation remains well above the bank's 2% target, markets now expect it to cut rates in December.

Not OK computer

The British government said it would outlaw the **resale of tickets** for live events at prices that have been massively inflated over their face value. The stock of StubHub, a website for resellers in America, branded as Viagogo elsewhere, slumped. Trading in such tickets for acts like Oasis has caused a furore, as touts use bots to snap them up for resale. No surprise that tickets for this week's Radiohead concert in London, priced at £85 ($112), were reselling at £682.



The Economist

Anything Goes America

Where the loosening of rules and tolerance of corruption will lead

WHEN HARRY TRUMAN left office he had many opportunities to get rich. He turned them down. "I could never lend myself to any transaction, however respectable, that would commercialise the prestige and dignity of the office of the presidency," he said. The man who had given the order to drop two atom bombs lived on income from his memoirs and an army pension worth $1,350 a month in today's money.

What a sucker! Had he been president in the 21st century, Truman could now be flying private to paid speaking engagements, soliciting donations to his foundation from foreign governments and watching his daughter serve on company boards and his former staffers run their own lobbying shops. Presidents reflect the mores of their times (see United States section). Truman's instinct to follow self-imposed rules was characteristic of 1950s America. What, then, are America's rules in 2025, when the president has accepted a Boeing 747 from one country seeking his favour and a $130,000 gold bar from another, and when his family has struck cryptocurrency partnerships with foreign governments?

This is the Anything Goes Era in America. It did not start with Donald Trump, but he has upped the tempo and removed constraints that once held others back. Skirting the rules is alright if you have political protection. Wealthy individuals may rest easy knowing that their tax returns will not be audited. The Department of Justice has dropped prosecutions of politicians for corruption. Its public-integrity unit has been gutted; the Foreign Corrupt Practices Act, a post-Watergate piece of good-government reform, has in effect been shelved. Past presidents have pardoned donors and relatives, but only on the eve of leaving office. Recipients of Mr Trump's clemency this year include a cryptocurrency mogul jailed for money-laundering and the son of someone who gave his political movement $1m.

The way the president's family members have enriched themselves in his second term would have astonished Truman, but it is small print in a $30trn economy. That is not true of tariffs, export controls and mergers, where Mr Trump's power and personality make it almost a fiduciary duty for company bosses to seek his good graces. Donors to the new White House ballroom, where the East Wing once stood, include firms whose main business is government contracting and those seeking regulatory approval for mergers.

Now heaven knows

When there is one decision-maker and he often changes his mind, it is worth spending a lot to win his favour. Washington lobbyists used to focus on Congress. Now many of them ignore lawmakers and instead sell to clients the impression that they can influence the president or his political movement. All this eats away at the rule of law. Did the administration approve a merger, or grant an export licence, because it was in the national interest? Or because the company bought the president's goodwill? When anything goes, nobody knows.

It is easy for Mr Trump's opponents to be shocked—shocked!—at the discovery that people love money and power, and that when mixed together they are intoxicating. And his supporters are right that there can be economic benefits when governments refrain from aggressively enforcing some rules. It may make it easier for companies to operate and foreigners to invest, without worrying that an overzealous bureaucrat will nail them for some petty infraction.

Yet this argument can lead somewhere dismal. All advanced economies have strong laws and expectations that they will be applied impartially. There is no example of a big, mature, wealthy democracy smiling on public corruption and treating rules as arbitrary. So although the eventual costs are uncertain, it is plainly harder for an economy to thrive in the long run when the most important question for a boss is: "Do you know the president?" (see Business section).

The best parallels are found in some emerging markets, where big men rule by whim and companies must suck up to succeed. Or in America's past, before the rules and habits that until recently promoted clean government were set out. But the Anything Goes Era is different from the Gilded Age or the 1920s, both moments when a dash of political corruption went along with technological innovation and economic growth. Then, politicians stole or skimmed money off contracts to buy political support. That is not how it works now. Outright theft from government appears to be rare. The president does not need to buy his party's loyalty, since the rank and file love him and Republican lawmakers fear him.

There are other differences, too. In the 1920s federal, state and local government spending amounted to just 5% of GDP, compared with 36% now. In the Gilded Age the presidency was even more marginal to the lives of Americans. The republic has had florid political corruption scandals before. What is new is the mix of a bossy, gargantuan state with the perception that it can be bought.

Surprisingly, the president appears to pay a puny political price for his self-dealing, or the loosening of rules that accompanies it. Partisanship means that if Democrats say something is crooked, MAGA types conclude that it must be fine. The other side has enough examples of grubbiness—think of how President Joe Biden's family took advantage of his position, or the Clinton Foundation received money from Qatar—to make what Mr Trump is doing seem different only in degree.

That is mistaken. And to assume partisanship gives unlimited permission to abuse or suspend rules is too pessimistic. Good-governance reforms have followed each era of excess: the Federal Corrupt Practices Act after the Gilded Age, the Ethics in Government Act after Watergate. Ten years ago a man ran for president denouncing Washington insiders and promising to drain the swamp. That is still one of the great themes in American politics, much more persuasive than warning that liberal democracy is under threat. The president has given his opponents a solid-gold opportunity to use it. ■

Geopolitics

Europe's partnership with China

Either Europe grabs hold of its own destiny, or China and America will force change upon it

FOR DECADES the European Union took quiet comfort from the belief that it held the key to the future. True, China dominated manufacturing and America had the biggest armies, but in the realm of law and regulation the world's superpower was in Brussels. During an era of globalisation, only the EU understood the alchemy of transmuting nation states into blocs that are greater than the sum of their parts.

Today, no such comfort is to be had. China is not just dumping exports and subsidising its companies, it is also outcompeting and out-innovating big European industries, including carmaking (see Briefing). Last year Germany's trade deficit with China stood at €66bn ($76bn); this year it could widen to over €85bn, around 2% of GDP. Alarmingly, China is exploiting Europe's dependence, weaponising embargoes or the threat of them in chips and rare earths. This comes as President Donald Trump has cast doubt on America's commitment to guarantee the security of NATO. As if that were not bad enough, Mr Trump has also exploited Europe's lingering military dependence, to impose a trade deal that Europeans hate.

The EU was designed to flourish in a predictable world of rules and procedures. Today, it is caught between two snarling silverbacks asserting the law of the jungle. In talks between America and China that have big consequences for Europe's own economy, it is being treated with contempt (see Chaguan). If Europe is not to drift into irrelevance, it urgently needs to find a new, tough-minded way of using power.

So far, this ambition is provoking two very different reactions—and unfortunately, both could backfire. In Brussels and some capitals the talk is of using trade protection and industrial policy to shore up strategic manufacturing. Some industries are indeed strategic, but the justification of national security risks everything from grain to timber being protected, which would only accelerate Europe's decline. Even when tariffs are justified, they are a tax on Europe's already overtaxed consumers and, as duties on electric vehicles have shown, they may not succeed on their own terms.

For their part, Europe's populist-right parties are riding a wave of dissatisfaction with the continent's elites. Brussels, the populist leaders say, is robbing European economies of dynamism, as well as sovereignty. They believe the remedies for Europe's lethargy lie in national capitals. Yet even if no country follows Britain out of the EU, a breakdown of co-operation in Brussels would create a toxic brew of stagnation, recrimination and fragmentation. That would lead the EU down a perilous path: in a lawless world there is strength in numbers.

What, then, should Europe do? For a start, it can still gain from being the defender of rules. Even if might is right for America and China as they flout global norms, many smaller countries understand that they will benefit from a less uncertain world. The EU, by virtue of its huge market and its expertise, has convening power, especially in trade. It should set itself up as the champion of like-minded countries that want to forge ahead without America, which accounts for only 16% of global trade. Talks with India and the five members of Mercosur have until recently been agonisingly slow. Early talks with the CPTPP, whose members are natural EU allies, deserve a greater sense of urgency. Exporters in the German *Mittelstand* are already finding that growing markets like India and Brazil are compensating for the decline in Chinese demand.

Europe can still be tough. Under trade rules it can act against Chinese dumping and subsidies. It was foolish for Europe's carmakers to depend on a single supplier of chips—especially after seeing the harm of Germany's reliance on Russian gas. Ursula von der Leyen, president of the commission, has promised to act after China's rare-earth restrictions, though that will take time and money. China may retaliate against firms that stockpile components with rare earths: all the more reason to diversify suppliers fast. If need be, the EU should use its "anti-coercion instrument", which allows countermeasures, including curbs on exports vital to China.

A second task is for European countries to make better use of the power they have, by integrating their economies. The centrist parties still in office are scared that this will play into the hands of the populist right. However, inaction is a policy too, and leaders' bickering and timidity only vindicate the complaint that the ruling elites are out of ideas and that they lack the competence that is supposed to be their selling-point.

By failing to integrate, the EU is leaving a vast sum of money on the table. A single market that was designed for goods is failing to help economies dominated by services. Europe talks about deregulation with great gusto, but the urge to regulate is usually stronger (see Charlemagne). Governments have dithered over blueprints for boosting Europe's competitiveness, notably the report produced last year by Mario Draghi, an Italian grandee, fearful that such moves will cost them influence or upset this or that interest group. And with much work to do on integrating financial services and energy markets, politicians should resist the voguish fetish for manufacturing. Deindustrialisation is not an idle concern, but factory jobs would be falling even without Chinese competition.

To be most effective, these measures will require reform at home. Welfare is too expensive and bureaucracies too inefficient. Growth and competitiveness are hampered by regulation. Planning is often too vulnerable to challenge. The cost of energy is a tax on manufacturers.

The will to power

To many people in Brussels, all this will sound like an impossibly tall order. It is easy to say what needs doing, but hard to overcome the barriers to 27 independent countries acting in concert. That leads to Europe's last and perhaps the greatest task. Awake to the threat, its leaders need to persuade their voters that change is coming one way or another. Either Europe grabs hold of its own destiny or China and America will force crushing change upon it. The choice is Europe's. ■

Pay floors

Time for a pause

Why governments should stop raising the minimum wage

IT IS EASY to see why politicians like raising the minimum wage. Short of cash yet keen to fight inequality, they have seized on a tool of redistribution that costs governments little and wins votes. In its budget on November 26th Britain is likely to raise the minimum wage, which sits at 61% of median income, up from 48% a decade ago. Germany introduced a minimum wage only in 2015; by 2023 it had crossed 50%. And although America's federal rate of $7.25 an hour has not changed since 2009, many states and cities controlled by Democrats have raised their pay floors far higher. The average effective minimum wage is around $12 per hour; the highest is over $21.

In one respect the surging minimum wage is a triumph for economists. Having originally been sceptics, they embraced the policy around the turn of the millennium, arguing that wage floors did not eliminate jobs as they once feared—a finding that the experience of the past two decades seemed to confirm. Yet as we report this week (see Finance & economics section), just as governments are championing the consensus, scholars are getting cold feet. A growing body of research suggests that minimum wages distort economies in ways that do not immediately appear in jobs numbers.

One worry is that it takes time for minimum wages to kill jobs. Evidence from a big hike to Seattle's pay floor in 2015 and 2016 suggests hiring at the bottom end of the labour market slowed by 10%, even though existing workers were typically not laid off. Another is that higher minimums degrade jobs rather than destroy them. When employers must pay more, but can still hire easily, they may cut corners elsewhere. New research finds that big increases in the minimum wage are associated with shorter or less predictable working hours, more workplace accidents and fewer perks such as health insurance.

A final risk is that early success breeds overconfidence. Moderate minimum wages can, counterintuitively, make jobs more abundant, by offsetting the bargaining power of big employers, who would otherwise restrain hiring to suppress pay. But the more governments embrace big hikes, the more likely they are to eliminate jobs—just as a big enough tax rise will reduce revenue. One recent peer-reviewed estimate puts the average American minimum wage that corrects for employer market power at under $8.

Beyond that, the minimum wage is a crude and wasteful tool for redistribution. Many minimum-wage workers are not poor, but live with higher earners. And when firms raise prices to offset their steeper costs, it is the poor who suffer most—more so than from sales taxes, according to one paper.

Politicians should beware these effects. Although raising minimum wages invariably polls well, electorates everywhere are also angry about soaring prices and a crisis of affordability. There is a danger of a doom loop in which employers' higher costs are passed on to consumers, making life still less affordable, including for the very workers governments are trying to help. Zohran Mamdani, the mayor-elect of New York, has promised to raise the minimum wage from $16.50 today to $30 by 2030. Prices would rise significantly as a result, making an already expensive place to live even dearer.

There are better ways to help low earners. In-work tax credits are better targeted towards the poor and, if paid for with growth-friendly taxes, less harmful to the economy. They may lack the appeal of minimum wages, the costs of which are well hidden. But after a decade of aggressive increases, the responsible option is not to go higher still. It is to stop. ■

Ukraine

The power and the fury

A corruption scandal provokes justified outrage. But the West should still help Ukraine defend itself

AN INTELLIGENCE OFFICER likens it to an atomic bomb exploding in Volodymyr Zelensky's face. A scandal involving kickbacks and money-laundering centred on Energoatom, a state-owned nuclear-power agency, is fast becoming the worst crisis Ukraine's president has faced since Russia invaded his country almost four years ago. Two ministers have already been removed, one arrested; more high-level casualties seem certain. For Ukraine's Western supporters, the news is infuriating. For ordinary Ukrainians—whether fighting on the front or living under daily Russian missile and drone attacks—it is far worse. While their country is engaged in an existential struggle, bigwigs are alleged to have misappropriated huge sums, perhaps $100m (see Europe section). If guilty, they have deprived their own troops of resources.

Outrage is justified. But it is vital to understand what this scandal means—and what it does not. First, the graft it reveals is not new. Ukraine, though far less corrupt than Vladimir Putin's Russia, has a long history of sleaze. The Western mission to encourage reform was always destined to be slow. The effort predates Mr Zelensky and will outlast him.

Second—if you squint—the scandal contains a glimmer of good news. Despite Mr Zelensky's clumsy and quickly reversed attempt to curb their independence in July, the country's anti-corruption agencies appear able to do their job. That is precisely what Ukraine's supporters have hoped to see, and today's revelations may end up strengthening them. ▸▸

Third, at least for now, Mr Zelensky himself is not directly implicated, though all bucks stop at his desk and one of those named is his former business partner. His position is clearly damaged. His chief of staff, Andriy Yermak, is now under pressure and may be sacrificed. Mr Zelensky must do a much better job of fighting corruption to maintain morale at home and support abroad. And if the scandal were to render his position untenable, so be it. At the war's outset he proved himself a hero by refusing to flee, but no leader is indispensable. Britain changed prime ministers in both world wars; America fought on to victory after the death of FDR in April 1945.

Yes, the danger that this will poison support for Ukraine is real. Details emerged this week of a "peace" plan that would give Mr Putin much of what he wants and severely weaken Ukraine. It is not yet clear how seriously Donald Trump's administration views this proposal. But critics of Ukraine in the West—from America's MAGA Republicans to European populists—have seized on the corruption scandal as proof that Ukraine is unworthy of support. They have long hunted for an excuse to justify throttling aid or normalising relations with Moscow. This affair gives them a superficially plausible one.

But only superficially. Viewed through a geopolitical lens, this scandal does not change anything. Ukraine is not, and never has been, a model of clean governance. That is not why the West has spent some $400bn—and counting—to help defend it. Were Western support to falter, the only winner would be Mr Putin. He would be closer to crushing Ukraine and turning it into an even more corrupt client state. If that were to happen, the eventual cost to Europe (and to America, should it continue to honour its NATO commitments) would be vastly higher than the cost of continuing to support Ukraine.

A victory for the Kremlin there could mean a nation of over 30m in its thrall on the EU's doorstep, awash with weapons and bitterness. Mr Putin might turn his attention towards NATO or Moldova. There could be huge refugee flows. Supporting Ukraine is not an act of selfless principle, but an exercise in hard-headed realism. The defence of Ukraine is the defence of Europe. If the profiteers are guilty, they deserve to rot in prison. But the West must not let a nasty scandal blind it to the greater danger that looms from Moscow. ■

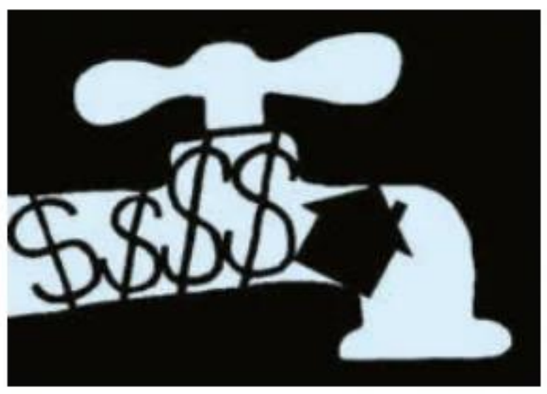
Property

The incredible shrinking market

Mortgage lending in America is seizing up. How to revive it

THE AMERICAN mortgage market is shrinking. After years of rising house prices and dwindling lending, the value of mortgage debt as a share of the housing stock is at its lowest in 60 years. To those who remember the global financial crisis, when troubled housing loans blew up the banks, this may sound like good news. In fact, it is a cause for concern. Many families are being needlessly locked out of homeownership. Labour mobility has slowed, as homeowners stay put. And because modest, single-family homes have fewer prospective buyers, fewer of those properties are being built. America's mortgage market needs unclogging.

The surging interest rates of recent years are partly to blame. During the pandemic homeowners rushed to refinance at record-low interest rates. Now that rates are higher—the 30-year mortgage rate stands at 6.2%, compared with 2.7% in early 2021—they are loth to move. The Federal Housing Finance Agency (FHFA) has found that the lock-in caused by higher rates cut house sales by 1.7m between mid-2022 and mid-2024 (see Finance & economics section).



That is not the whole story. Mortgage activity was depressed long before rates began to rise, because of post-crisis regulation, especially for smaller loans and borrowers with average or below-average credit scores. Mortgage lending to those with credit scores of 760 and higher, above the average of 705, now accounts for two-thirds of the total, more than twice the prevailing share of just over two decades ago.

In response to the drought, the Trump administration has floated various ideas. One of them is a side-show. The president and Bill Pulte, the head of the FHFA, have both enthused about 50-year mortgages. But ultra-long loans would leave homebuyers paying off mortgages into retirement, and would worsen the lock-in effect when interest rates rise, gumming up the housing market further.

Mr Pulte also says the administration is studying portable mortgages, which are a better idea. Portable loans, which are common in countries including Britain and Canada, allow homeowners to take their mortgages with them when they move house. It could help ease the part of the problem caused by high interest rates, and boost mobility again.

More is needed to revive the market. After the financial crisis, lenders' fees were capped, and standards for assessing a borrower's ability to repay were tightened to the point that issuing loans would often be unprofitable. Many borrowers with less regular forms of income, such as freelance workers, are now locked out of the market. Even credit unions—hardly the ravenous capitalists of Wall Street—are calling for rules to be changed for loans below $100,000, which are now all but impossible to make.

At the same time, owner-friendly rules at the federal and state level mean that it now takes a lender 608 days to foreclose on a home, up from less than 200 in 2007. In some states such as New York the average repossession takes over five years. Built-in waiting periods, lengthy court proceedings and mandated mediation have all helped struggling homeowners hang on to their properties for longer. But if lenders cannot repossess homes, they will treat mortgage debt as if it is unsecured, shutting many potential borrowers out of the market.

Ordinary borrowers with middling credit did little to cause the crash in 2007-09. But the rules introduced in its aftermath are punishing them, without making the financial system any safer. As the mortgage market shrinks ever further, now is the time to correct past mistakes. ■

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Letters *universal child care, the BBC, AI helping the consumer, fighting for your country, LinkedIn*

Child care works

Universal child care can harm children, you claimed ("Don't rock the cradle", November 8th). The key issue in this debate is not universality itself, but quality. Research across many countries shows that low-quality child care can have negative effects, whereas high-quality universal programmes deliver strong developmental and social benefits, particularly for disadvantaged children.

The paper you cited by Lawrence Berger, Lidia Panico and Anne Solaz, illustrated this nuance well. It found positive effects on language skills, no effects on motor development, and some negative effects on behaviour. The positive outcomes were largest for disadvantaged children, who are least likely to access good-quality provision. The authors' policy recommendation is to improve and expand access for low-income families, not to discourage universal child care.

Universal provision means choice, not compulsion, and can improve the system overall by increasing quality and access through competition. That important distinction was lost in your framing.

PROFESSOR ALMUDENA SEVILLA
London School of Economics

Over there

One point you didn't mention in your coverage of the latest travails to hit the BBC ("Inform, educate, enrage", November 15th) is that it spends an ever-increasing amount of time reporting on America, Donald Trump, Elon Musk and the rest. More Americans visited its website in October than they did ABC, CBS, NBC or the *Wall Street Journal*. Put simply, the BBC is a trusted, growing voice in America and it appears to quite like this status.

But why should Britain's national broadcaster, paid for by British households, spend more and more money covering America and be drawn further into its deepening psychodramas? I don't need to know the complex structures of BBC funding to understand that I am being fed ever more of the American-news circus, whereas British politics is comparatively under-scrutinised, especially at the local level.

DAN JOHNSON
Whitley Bay, Tyne and Wear

AI benefits the producer

Consumers can use artificial intelligence to help overcome information disadvantages, you explained, which can lead to "The end of the rip-off economy" (November 1st). This is indeed welcome, but we need to look beyond George Akerlof's study from 1970 of consumers in the used-car market, who were trying to determine whether vehicles actually worked or were "lemons". A paper by Steven Salop and Joseph Stiglitz from 1977, on "bargains and rip-offs", noted that there are differences between price-conscious consumers and others who are "less rational and calculating". Not all consumers will benefit from AI. Education, experience and income are factors in who uses AI tools and how well they do it. It is more likely that less-sophisticated users will be ripped off.

Worse, the rip-off risk doesn't stop at simple skill gaps or unequal access. AI could create opportunities for personalised manipulation with detailed user data and behaviour analysis used to tailor manipulative strategies in real time. AI can personalise persuasive messages, optimise timing for "nudges" and influence user decisions in ways that are harder to detect. The digital divide now has a new dimension.

ROCIO CONCHA
Chief economist
Which?
London

How is AI going to help me book an airline ticket when the airline's AI has already decided how much it can squeeze out of me for that ticket? The airline's AI has all my information, a lifetime of data on my prior purchases, my demography, and a good grasp of my psychology, as well as that of my partner. It knows my, and our, pain points. Unless I use a VPN. Unless I'm smarter than the AI, and that's unlikely. My AI will tell me what I already know. I'm at a disadvantage and always will be.

It is not "informational asymmetry", it is power asymmetry. Those with the resources and knowledge and money hold power over the consumer. And those with the power are those who are going to make the AI agents.

It is not the end of the rip-off economy, it is its exponential explosion.

RICHARD MCCUE
San Diego

#LinkedIn #Smug

Bartleby's column on the self-promoting, trumpet-blasting found on LinkedIn was superb (November 1st). I cringe to confess that my career coach stands over me with hooded robe and pitchfork admonishing me to "post more, comment more", vomit-inducingly known as "pomo/como."

I realise that if I do not live the right life I am at risk of spending eternity forced to read LinkedIn self-adulating posts. For now, my only hope is at some point I will be done with it and can helicopter my laptop across the room, sneering as it bursts into flames, as I walk away in Mad Max fashion.

GORDON HILL
#Faber62 graduate
#knowledge is good
Boca Raton, Florida

Bartleby's piece on the art of self-promotion reminded me of the wise words of George W. Bush's grandmother: "Nobody likes a braggadocio." It's a pity today's thought-leaders never met her. As a proud thought-follower, may I offer a gentle plea? Dial down the self-worship. Our newsfeeds, and stomachs, can handle only so much bragging.

JAY WALKER
Gibsons, Canada

Your country needs you

As an American who's spent a good chunk of the past three years volunteering in Ukraine, I couldn't agree more that Europe would benefit immensely from helping to push back the Russian invaders ("Europe's opportunity", November 1st). However, you pitched your argument at politicians, not ordinary voters, who seem to be unenthusiastic about defending their democracies. A Gallup poll in the EU last year reported that only 32% of respondents were willing to fight for their specific country. In Britain, which makes much of its martial traditions, 48% of respondents told Ipsos in May this year that there are no circumstances where they would be willing to take up arms to defend their land. With numbers like these, European leaders have their work cut out for them.

CHRIS HENNEMEYER
Washington, DC

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

ACER
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Closing date for applications: 9 December 2025, 12:00 noon Central European Time (CET)

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Chief Financial Officer

Zug, Switzerland

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BY INVITATION

María Corina Machado

The opposition leader on the promise of a post-Maduro Venezuela

VENEZUELA STANDS on the threshold of freedom after 26 years of devastation. This moment belongs to a society that refused to be broken, one that defended its democratic will against a ruthless regime that captured institutions, criminalised the state and weaponised poverty. Today, Venezuela is closer to a political transition than at any time in a quarter-century, and that transition can, and will, be orderly.

For years the regime of Hugo Chávez and his successor Nicolás Maduro sustained itself by insisting that the country was hopelessly divided. Its survival depended on that fiction. With trillions of dollars at its disposal, the regime tried to fracture Venezuelan society: by class, by race, by region, by loyalty. But I have travelled every corner of my country, and I know the truth: Venezuelans are not fractured. What the regime tried to impose never took root.

Meanwhile, the state itself was being infiltrated and repurposed to serve illicit interests. A criminal network embedded itself deep in the armed forces, security agencies, the judiciary and the oil sector. The Cartel de los Soles operates from within the military hierarchy, is directed by Maduro, and my team believes it now generates more revenue than Venezuela's diminished oil industry. Cocaine corridors, money-laundering routes, illegal gold mining, oil swaps to navigate sanctions and alliances with foreign intelligence services became the regime's lifeline.

And yet, Venezuelans resisted. They learned to support one another in the face of repression. Teachers kept schools running on minuscule salaries. Journalists and human-rights defenders built some of the hemisphere's most rigorous documentation networks. Local leaders organised information flows to circumvent social control and surveillance. Families and neighbourhoods sustained political prisoners with food, medicine, clothing and the simple acts of care that the state sought to deny them. This was not improvised resistance; it was the operating infrastructure of a society preparing itself for a democratic reckoning.

That preparation took shape in the October 2023 primaries, the moment Venezuela reunited. Venezuelans abroad—including many of the more than 8m forced to flee—voted alongside those inside the country. Volunteers monitored every step. This collective effort produced legitimate leadership when captured institutions could not. And with over 93% of the vote, I received a nationwide mandate that no authoritarian prohibition could undo.

When the regime barred me from running, Venezuelans did not retreat. We reorganised and voted in overwhelming numbers. On July 28th 2024, the verdict was resounding: Edmundo González, the opposition candidate, won the presidency with 67% of the vote. Despite intimidation, citizens secured and safeguarded more than 85% of the official tally sheets within 24 hours—an extraordinary achievement in a country with extreme media censorship, lack of resources and no institutional guarantees.

The regime responded as it always has: with violence. It refused to acknowledge the results and unleashed the most severe wave of repression in years. Forced disappearances, torture, sexual abuses and collective punishment became tools to suppress an electoral truth that had already become irreversible.

But now, at last, the international community has recognised the criminal nature of this regime and is acting accordingly: treating Venezuela not as a failed state, but as a nation hijacked by a narco-terrorist structure. For years we urged the international community to confront the criminal networks that kept Maduro afloat. Today, under a coalition led by the United States—which has moved warships and planes into the region—and with the support of several Latin American and Caribbean allies, maritime interdictions, sanctions enforcement and law-enforcement measures are finally constraining the regime's finances. And for the first time, this pressure is cracking the system from within: its operators no longer trust one another; factions blame each other for losses; and the fear inside the regime is palpable. The threat they once projected outward now consumes them.

Markets have noticed. Venezuelan bonds, once considered worthless, have rallied. Investors and governments now recognise what Venezuelans have demonstrated: that the country is preparing for an orderly transition and a historic reconstruction. With the world's largest oil reserves, vast gas fields, critical minerals, huge agricultural potential and a global diaspora ready to return, Venezuela holds one of the most significant recovery opportunities of this century. Our team estimates that a democratic transition could unlock a $1.7trn business opportunity over 15 years.

The transition to democracy is not hypothetical; it has already begun. And it advances because the conditions are now aligned. The opposition has a mandate to lead. The majority of the armed forces believes in the constitution. International pressure is growing. And the regime's financial and coercive pillars are weakening.

Above all, the transition advances because Venezuelans have made it unstoppable. The same citizens who confronted a narco-terrorist state with tally sheets instead of weapons; who turned communities into platforms of civic co-ordination; who drove the largest democratic mobilisation in our modern history. Their courage, discipline and unity are testimonies of purpose.

Venezuela is not simply approaching a political transition; it is approaching a national renaissance. With clear rules, credible enforcement and sustained international engagement, our country will become the Latin American miracle of the 21st century: a nation that endured one of the deepest collapses in the hemisphere and forged one of its most extraordinary recoveries. ■

María Corina Machado is the leader of Venezuela's opposition and the winner of the 2025 Nobel peace prize.

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Learn more about Adopt the Blue and Blancpain's Ocean Commitment

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From customer to killer

BEIJING, BRUSSELS AND EMMENDINGEN

Chinese regulations and competition are panicking European manufacturers

BERT SUTTER, the boss of a medical-devices firm and head of an association of German manufacturers, has a blunt assessment of European industry's prospects in the face of a wave of cheap Chinese competition. "In my sector they look at the price-point of the market leader and sell for roughly half of that," he says. "Europe is not prepared for this hyper-competition."

It is not just Mr Sutter who is concerned, and it is not only low Chinese prices that are prompting consternation. The VDMA, an association of German machinery firms, put out a report in June which argued that China is "not playing fair" and urged the European Union to find ways to level the field. European manufacturers' anxieties were amplified in October when China abruptly curbed exports of two critical inputs. First it added five rare earths (minerals which are used to make many motors and other gadgets) to its new export-licensing regime. Days later it banned the export of computer chips made by Nexperia, which supplies lots of carmakers, among other European customers. Several European firms warned of production stoppages and a few German companies put some workers on leave without pay. China, many European manufacturers have concluded, is threatening to put them out of business, by both fair means and foul. What can be done to protect European industry, they ask—and will Europe have the gumption to do it?

From infatuation to scorn

The wails are loudest in Germany, which is Europe's biggest exporter to China and its biggest investor in it by far (see chart 1 on next page). For the *Mittelstand*, the small manufacturers that constitute a big slice of German industry, China used to be a source not of angst but of profit. Their precision-engineered machine tools were an exquisite fit for its rapid industrialisation. Chinese consumers raced to buy German cars. Many German firms set up shop in China, often using it as a base to export throughout Asia. In 2016 China became Germany's biggest trading partner.

Times have changed, explains Alexander Rudolph, a manager at SensoPart, a German sensor firm. When he first went to China in 2012, he was struck by a Chinese colleague's excitement at riding in the company's Volkswagen. A German car was clearly a wondrous device. Now, says Mr Rudolph, who visits China at least once a year, his colleague considers German cars embarrassing. Only the latest Chinese models will do.

Once-stellar growth inside China has, for many foreign firms, slowed to a crawl as competition with local rivals intensifies. In addition, Germany's previously small trade deficit with China has ballooned (see chart 2). Last year it reached €66bn ($76bn), or around 1.5% of GDP, driven by a collapse in German exports to China and a rush of imports, notably of cars, chemicals and machinery—hitherto German specialities.

Germany's trade deficit with China this year is expected to surge again, to around €87bn. That may be partly because goods that might otherwise have gone to America are rebounding off its new tariff wall. Chinese exports to America fell 17% from January to September, but exports to Europe rose by 8%. September was Chinese carmakers' strongest month ever in Europe. Chinese brands now account for 20% of the hybrid market and 11% of electric-vehicle (EV) sales.

German cars command only 17% of the Chinese market, down from a peak of 27% in 2020, according to Rhodium, a consultancy. Worse, Chinese competition also jeopardises sales in other markets. China's net exports of cars have risen from zero in 2020 to 5m units last year. Germany's have halved over the same period, to 1.2m units.

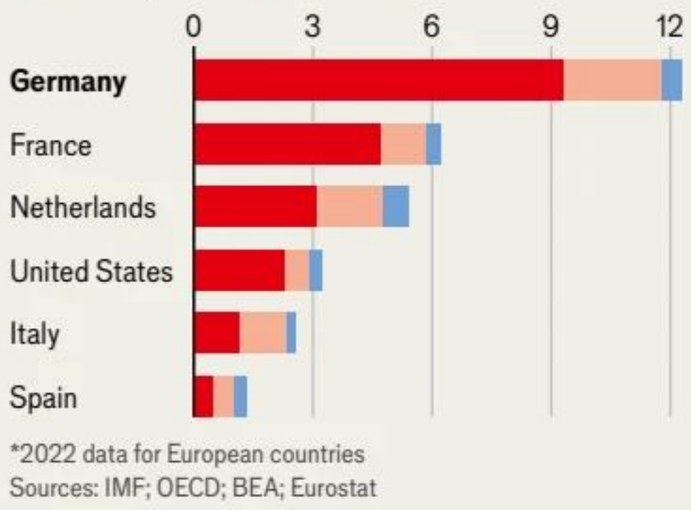
Such figures have triggered fears in Germany of a wave of deindustrialisation. "We are losing market share, we are losing workers," says Oliver Richtberg of the VDMA. "This could create a serious problem for employment in Europe." Half of the industrial companies facing Chinese competition surveyed last year by the German Economic Institute (IW), a research outfit based in Cologne, said they planned to cut output and jobs. In *The Economist*'s informal survey of *Mittelstand* firms, few felt immune to Chinese pressure. "The feared China shock has arrived," writes IW.

European firms have long complained that their Chinese rivals benefit from artificially cheap land, energy, capital and other subsidies. They sometimes also skirt European product standards. But the sudden withdrawal of access to rare earths and Nexperia's chips have made the threat to European industry much more explicit. Although the rare-earth controls were suspended for a year after America and China struck a trade deal on October 30th, the EU, despite its pretensions to "strategic autonomy", found itself a bystander to negotiations with deep consequences for its economy. Moreover, the original licensing regime for seven other rare earths remains in place, allowing China to slow down deliveries when desired. And whatever the notional rules, Chinese officials can still curb deliveries of all manner of inputs for European industry more or less at whim.

As it is, China is seeking to prevent stockpiling of rare earths, taking companies' past purchases as a baseline and making it clear that much bigger consignments will not be allowed. China has also said it will "study and refine" its export controls, suggesting that its chokehold will become only more constricting. Although some sales of Nexperia chips have resumed, they are being drip-fed to European firms, making it hard to plan. China, Mr Richtberg quips, is giving European firms "enough not to die, but not enough to live".

A lot to lose 1

Exposure to China and Hong Kong, total exports and Western-owned subsidiaries' revenues as % of GDP, 2023



*2022 data for European countries
Sources: IMF; OECD; BEA; Eurostat

What is more, in order to obtain rare-earth licences European firms have had to supply far more detailed information about their products, supply chains and customers than they would ever share voluntarily. "The Chinese state knows more about European firms' supply chains than Europe does," says Francesca Ghiretti of Rand Europe, a think-tank.

The next battlegrounds could be chemicals and pharmaceuticals. Chemicals firms warn that Chinese firms are undercutting their prices so massively that they may go out of business, not only destroying jobs but also creating another future vulnerability. The same applies to some of the basic ingredients used by Europe's pharmaceutical industry. Almost half of German manufacturers rely on products from China, according to the Bundesbank.

A bulging toolkit

On paper, at least, there is much that national governments and the European Commission (which takes the lead on trade) could do to protect European manufacturers. The EU has a wealth of anti-dumping and investment-screening tools that it could use to restrict Chinese imports and ward off Chinese investments in strategic industries. The industry commissioner, Stéphane Séjourné, has mused about requiring technology transfers from Chinese companies seeking to do business in Europe, much as China has long done for foreign firms setting up shop there. The nuclear option, heretofore unused, is the "anti-coercion instrument" (ACI), which allows the EU to retaliate more forcefully than the usual tit-for-tat, by suspending certain exports, for example. Emmanuel Macron is among the leaders who want the EU to consider deploying it.

As for potential Chinese chokeholds on the European economy, there is much talk, naturally, of finding alternative suppliers to reduce Europe's vulnerability. Mr Séjourné paid a visit in September to the Japanese government agency that deals with economic security. Japanese industry has stockpiled critical minerals for a long time, especially since China halted exports of rare earths to Japan in 2010 amid a diplomatic spat.

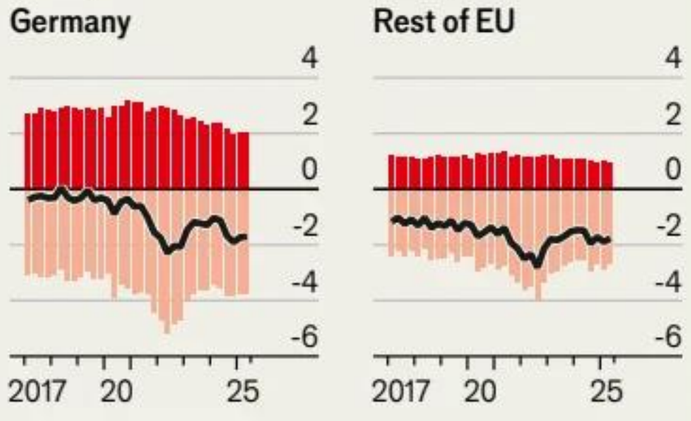
"We should be very careful in how we manage these dependencies," says Johannes Volkmann, an MP from Germany's ruling Christian Democrats. "As with Russian gas, our aim should be to become much more independent, and to do so with a sense of urgency." Comparisons with Russian energy, for which Germany had to quickly find substitutes after Russia's invasion of Ukraine in 2022, are frequent. "We learned this lesson painfully with energy; we will not repeat it with critical materials," Ursula von der Leyen, the commission's president, said last month.

In early December the commission plans to unveil a scheme called RESourceEU, which aims to loosen China's stranglehold. It is expected to create a "critical raw materials centre" which will monitor European firms' vulnerabilities—both current and potential. Some materials may be the object of "price floors", whereby they can be sold only at prices that would incentivise domestic production. Others may be subject to a requirement that firms hold minimum stocks. Public funding to develop industrial processes that use fewer pinch-point minerals—notably in battery production—may also feature. Recycling of rare materials is likely to be encouraged, notably by proscribing exports of "black mass", the powdered remnants of lithium-ion batteries.

Yet even within German industry, there is no unanimity about the best way forward. Some firms want counter-measures to restrict Chinese imports. But Janka Oertel of the European Council on Foreign Relations, a think-tank, notes a "weird decoupling", as big carmakers and chemicals firms with vast investments in China (and in some cases shrinking interests within Germany itself) lobby against measures that might antagonise the Chinese govern-

Open wide 2

European Union, trade balance with China and Hong Kong, % of GDP



Sources: Destatis; Eurostat

ment and so cause them problems in their most important market.

In fact, many German carmakers are doubling down on their Chinese investments. Last year Germany was one of just five EU countries to vote against the imposition of tariffs on Chinese electric-vehicles, fearing both retaliation and the impact on German companies exporting from China (the tariffs went into effect anyway). China accounts for close to 6% of German exports, according to Deutsche Bank, by far the highest level in the EU. There is much to lose and, for some companies, still much to gain, particularly if others retrench.

Germany's politicians are also in two minds. "We should not take anything off the table," says Mr Volkmann. The CDU worries that the spectre of deindustrialisation will fuel support for the hard-right populists of the Alternative for Germany, who lead in some polls. Moreover, officials would like to "de-risk" the manufacture of weapons, as Germany embarks on an expensive rearmament drive. But in high-tech industries such as batteries and EVs, officials believe German firms need to keep operating in China to remain capable of competing with their most sophisticated rivals. "If we were not competing in China, we would not innovate as quickly as we do," says Eckhard Kloth of Testo, a manufacturer of measurement tools.

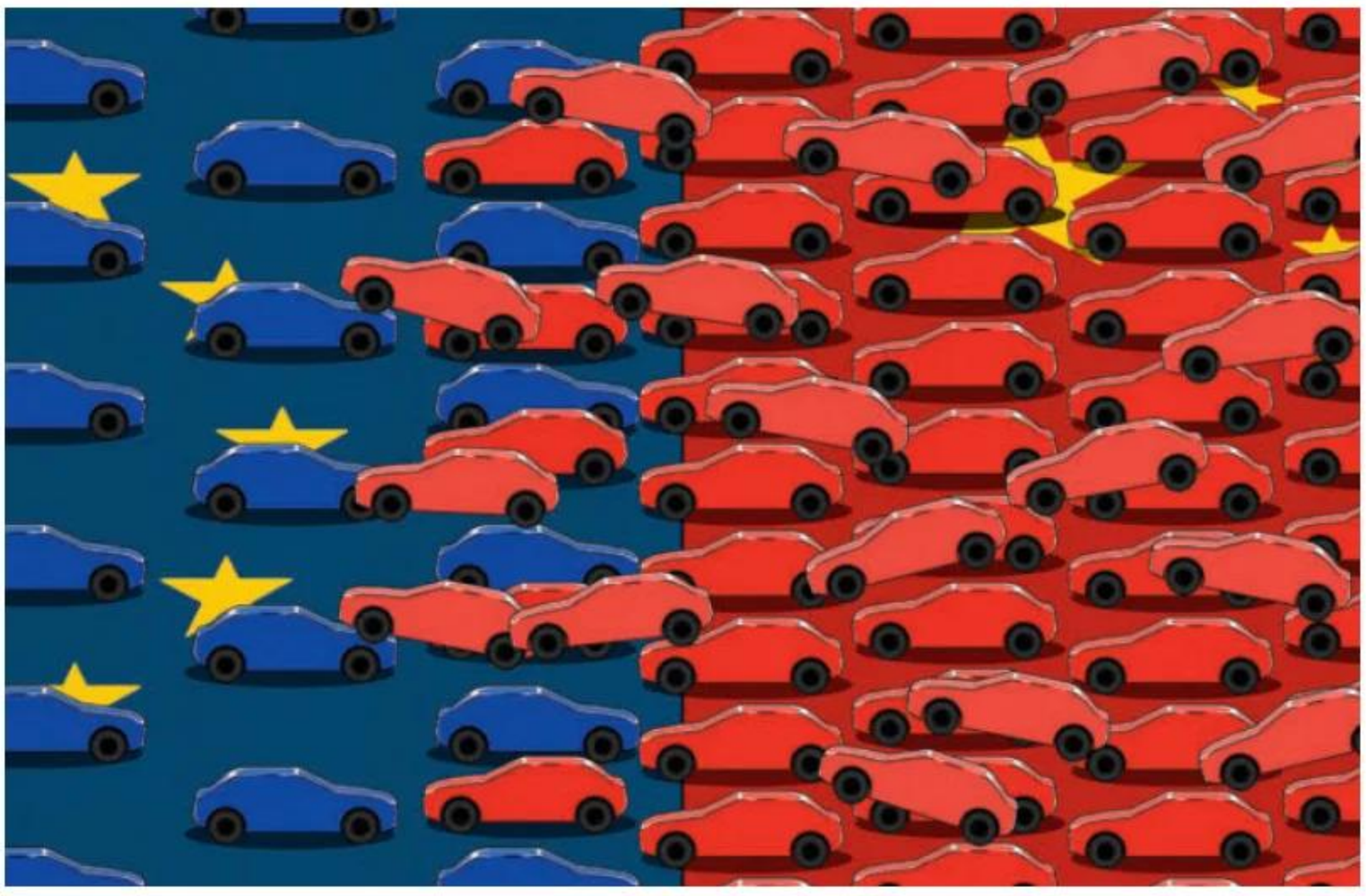
Unity is even more elusive at the European level. "There's not as much concern in Spain about dependence on China, as long as China keeps investing," says Toni Roldan of the Esade Centre for Economic Policy. Several eastern European countries are also less hawkish. Some argue that the rows about chips and rare earths show that Europe needs to get on better with China. Others scoff at lectures about the risks of relying on China from the countries that got Europe into this fix. "It was Western firms who moved their production and technology to China to make money," says an indignant Hungarian.

Hungary received 44% of all Chinese investment in the EU in 2023, according to Rhodium. Last year Viktor Orban, its prime minister, and Xi Jinping, China's president, signed an All-Weather Comprehensive Strategic Partnership for the New Era, the highest form of co-operation China offers. BYD, China's biggest EV maker, is building a $4.5bn factory in Hungary. Mr Orban would presumably be reluctant to put such munificence at risk to prop up German manufacturers.

Even were the EU to agree on countermeasures, it is not clear that they would work. Developing new rare-earth mines and processing plants, for instance, is a long and expensive process. "The EU has done the analytical work to identify projects," says Joris Teer of the European Union Institute for Security Studies, the EU's think-tank. "But we do not have the framework to make sure those are viable against state-sponsored Chinese competition."

The tariffs on Chinese EVs, which range from 27% to 45% depending on the manufacturer, are supposed to counterbalance the subsidies that Chinese carmakers receive. But in practice, Chinese EVs are still much cheaper and imports continue to rise. BYD is not planning to run its new factory in Hungary at full capacity—an apparent reflection of how much cheaper it is to make the same cars in China. The EU's tariffs need to be much higher if they are to have any impact, a European diplomat in China avers.

The tale of Nexperia also hints at how hard it is to protect "strategic" industries. The company's headquarters are in the Netherlands but it is owned by a Chinese firm and performs the final stages of chip-making in China. The Dutch government, worried that the Chinese owner was in effect hollowing out the local arm of the firm, invoked an obscure law to seize control of its management in late September. It was in response to this step that China curbed exports of Nexperia's chips. This week the Dutch government, presumably spooked by the grim consequences for European industry, backed down and revoked its takeover decree, although a legal battle over control of the company continues in Dutch courts.



Democratic deficit

There is a huge imbalance of administrative power between the EU's bureaucracy and European governments on the one hand and the Chinese authorities on the other. China can, without consulting any politicians or squaring plans with lawyers, adopt any economic measures it likes. The EU needs not only to get a supermajority (or in some cases all) of its 27 members on board; it also needs to draw only on its existing and highly circumscribed legal authority. Even the ACI, although intended to be intimidating, takes a long time to put in motion, during which target countries can work on undermining the consensus around its use. "We sent Ursula von der Leyen twice with a knife into a gunfight," concludes Mr Teer, referring to trade negotiations with America and China.

Indeed, the best hope of consolation for Europe lies not in stopping the China shock, but in weathering it. Manufacturing looms large in politics, but accounts for only 16% of the EU's GDP, a far lower proportion than services (70%). Even in Germany its share is only 20%. The industries in which China is making inroads—cars, machinery, metals, pharmaceuticals and chemicals—account for more than 10% of the value of industrial activity in only a few European countries, notably the Czech Republic, Germany and Hungary. Nor is there much overall sign of manufacturing jobs evaporating: the rate of job openings relative to total employment in the sector is roughly in line with historical averages.

Even the woes of the car industry are likely to have a relatively small impact on GDP. The IMF has modelled a scenario in which Chinese EV-makers' market share in Europe increases by 15 percentage points in five years. It calculates that the hit to German GDP would be just 0.2%, since workers and capital would be redeployed to other parts of the economy, notably services. De-industrialisation, in other words, need not be synonymous with decay. Or, to put it another way, Germany's economy is stuck in the doldrums not so much because of Chinese competition, but because productivity is growing only slowly and the working-age population is shrinking. The ACI cannot fix that. ■

United States

Government

The Black Friday presidency

WASHINGTON, DC

In Donald Trump's Washington, everything appears to be for sale

ANTHROPOLOGISTS WHO study ritualised gift-giving—a surprisingly lively subfield—take keen interest in the Maori belief that big gifts contain a *hau*, or life force. Recipients who fail to reciprocate risk illness or death. The idea is that gifts are never really free; reciprocity is part of the parcel. These days scholars of gift-giving need not travel to the South Pacific: they can do fieldwork in the Oval Office.

Recently a delegation of Swiss businessmen arrived there bearing a gold bar and a Rolex clock for Donald Trump, who said "Job well done," and accepted them on behalf of his presidential library. Days later America's tariff rate on Switzerland dropped by more than half. In May Qatar gave Mr Trump a presidential jet worth $400m, also bound eventually for his library. In October the Gulf state won approval to build a training facility for its fighter pilots at an air-force base in Idaho.

Deals involving the president are so numerous and varied that it is hard to keep track. Some benefit him personally. Others serve his pet projects, such as the East Wing ballroom or his library. Many of these donors and investors subsequently scored breaks from tariffs, lawsuits or regulations. Some hope for future relief: one firm that gave to the ballroom wants merger approval. Almost nowhere is a quid pro quo explicit. The point is to buy goodwill and trust Mr Trump to pay it back.

The president seems to invite such investments. His use of the power of the state for punishment and reward, coupled with his open transactionalism, incentivises companies, countries and individuals to pay for access and favour. This was true of his first term, but it is more visible and intense now. In the intervening years the president's business has also changed, diversifying into crypto and creating new avenues for self-enrichment. Another difference between Mr Trump's first and second terms is a retreat from anti-corruption enforcement. In the past ten months the president has dismantled the government's anti-graft apparatus. The result is a widespread perception that the White House is pliable and that activity once treated as scuzzy, scandalous or punishable will be tolerated, if not welcomed.

The two features of the new regime—reduced enforcement and fresh forms of pay-to-play—intersect in Mr Trump's use of the pardon power. He is not the first president to grant clemency to a donor. But when Bill Clinton pardoned Marc Rich, whose ex-wife had given to his presidential library, outrage rightly ensued. Mr Clinton anticipated this and waited until the last day of his term. Mr Trump feels no such compunction.

In the spring he pardoned two convicted fraudsters: Trevor Milton, the founder ▸▸

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of an electric-truck manufacturer, and Paul Walczak, a health-care executive. Mr Milton and his wife had donated $1.8m to the president's 2024 campaign. Mr Walczak's mother had recently paid $1m to attend a dinner at Mar-a-Lago; he cited her donation history in his pardon application. Normally the Department of Justice (DoJ) requires pardon-seekers to wait five years after conviction or release to apply: better to show remorse and reform. By contrast the pardons for Mr Milton and Mr Walczak came quickly, sparing both men prison and multi-million-dollar restitutions.

Such pardons have ignited a lobbying frenzy among white-collar convicts. Sam Mangel, a clemency consultant, says he has been retained by 28 applicants this year, up from one during Joe Biden's entire term. He gets inquiries daily. Some lobbyists who market "executive relief" charge seven-figure success fees on top of their retainers. The practice is a throwback to the Tudor court—except today's intercessors don't accept falcons. Meanwhile Mr Trump's neutering of Congress has shifted K Street's focus away from Capitol Hill and given rise to a new crop of lobbyists with ties to the White House.

Money permeates American politics, via unlimited super-PAC spending and lobbying fees. During the first Trump administration watchdogs warned about the possibility of influence-buying via the president's real-estate business. They worried that firms and foreign governments would spend big at his hotels to curry favour. Today this looks quaint. The president's entry into the crypto business offers more opportunities for self-enrichment—and greater riches. Estimates by Reuters suggest that revenues at the Trump Organisation reached $864m in the first half of the year, up from $51m a year ago. More than 90% came from crypto.

Mr Trump's pardon of Changpeng Zhao, the founder of Binance, the world's largest crypto exchange, captures this new swill of influence. Last year Mr Zhao spent four months in prison after pleading guilty to facilitating money-laundering. Binance was booted from the American market. Around the same time Binance reportedly helped build a stablecoin for World Liberty Financial, a crypto firm in which the Trump family owns a large stake. (Binance denies this.) In May a fund based in the United Arab Emirates, MGX, said it would buy $2bn-worth of World Liberty's tokens. The transaction has netted the Trumps millions this year.

Two weeks later Mr Trump agreed to let the UAE buy the most coveted AI chips—a privilege denied by the Biden administration, on account of Emirati chumminess with China. Negotiating the chip deal for the Americans was Steve Witkoff, Mr Trump's envoy, whose son is the boss of World Liberty. Opposite Mr Witkoff was the brother of the Emirati crown prince, the chairman of MGX. The White House and World Liberty deny that the UAE's crypto deal unlocked the chips. And yet a quid pro quo was hardly necessary; the incentives on both sides were clear enough.

Another feature of the new order is the Trump administration's choice not to prosecute some forms of graft. The DoJ has gutted its political-corruption unit and vastly narrowed the scope to bring foreign-bribery cases. The department has also dropped charges against Eric Adams, New York's outgoing mayor, and a probe into Tom Homan, Mr Trump's border tsar. Both men denied the allegations against them. Since January the president has pardoned ten politicians convicted of various forms of self-dealing.

Scholars understand patronage as a way to communicate politically. Mr Trump is unabashed, which is part of the point, notes Jacob Eisler of Florida State University. He is telegraphing to the MAGA base that he disdains norms and Democratic hand-wringing about the rule of law.

Patrimonialism is a means to bolster political power, too. By not prosecuting graft by others, or by pardoning the crimes of political allies, Mr Trump incentivises their co-operation. Equally, opposition or recalcitrance invites punishment. One of the DoJ's few political-corruption indictments this year targets the former chief of staff of Gavin Newsom, California's Democratic governor and a prominent antagonist of Mr Trump.

The insidious thing about corruption is that the public will never know what motivates policy, says Richard Briffault of Columbia University. Was that chip deal or this tariff break a credible decision made in the national interest, or a finagle made in Mr Trump's self-interest? Was it both? Who knows. ■

Marjorie Taylor Greene

MAGA's big break-up

The Epstein files opened fissures in Trumpworld

WASHINGTON, DC

FEW EMBODY the conspiracy-peddling instincts of the MAGA movement fringes more fully than Marjorie Taylor Greene. The congresswoman from Georgia, a reflexive Donald Trump loyalist, has always been light on policy and heavy on theatrics and outrage. Some of her most infamous hits include: an antiSemitic screed about a space laser controlled by the Rothschilds,

Bipartisan role model

a craving for QAnon kookery and, more prominently, repeated claims that the 2020 election was stolen from Mr Trump.

It was therefore startling when she turned sharply against the president during an interview with CNN on November 16th. "He called me a traitor...those are the types of words that can radicalise people...and put my life in danger." When prodded about her own role in amplifying America's noxious political discourse, Ms Greene fessed up: "I would like to say, humbly, I'm sorry for taking part in the toxic politics; it's very bad for our country."

The immediate cause for the bust-up between Ms Greene and Mr Trump is the Jeffrey Epstein affair, involving a dead sex offender with links to the president and other prominent figures. Ms Greene's defection was the latest break between the president and a stalwart of his MAGA movement, and a sign that Mr Trump's grip on congressional Republicans is loosening a bit, at least where Epstein is concerned.

For months the White House had pressed congressional Republicans to vote against a discharge petition that would compel the Department of Justice to release whatever files it has on Epstein. Ms Greene vocally supported the bill. In a stinging social-media post on November 14th, Mr Trump recanted his endorsement of Ms Greene, called her a "lunatic" and

announced he would support a primary challenge against her. "He's coming after me hard to make an example to scare all the other Republicans" ahead of the discharge petition vote, retorted Ms Greene.

Mr Trump's threats backfired. Thomas Massie, a Republican congressman from Kentucky who is leading the charge to release the files, indicated that a growing number of House Republicans would defect to support the measure. (True to form, Mr Trump responded by chiding Mr Massie for remarrying a little more than a year after his wife's death.) But faced with a mass mutiny in his own party, the president changed course and announced he supported a vote to release the files. "We have nothing to hide," he said.

On November 18th the House overwhelmingly approved the bill in a 427 to 1 vote; hours later the measure passed the Senate. The bill now goes to Mr Trump, who has said he would sign it (though the president could in theory have released the files without the need for any legislation).

This is a rare instance of the president losing control of his base for a sustained period. But for Ms Greene, perhaps the president's most ardent acolyte in Congress in recent years, breaking ranks over the Epstein files is the latest in a string of spats with the administration. Last month she blamed her own party for the longest government shutdown on record and sided with the Democrats in calling for an extension to the health-care subsidies at the heart of the standoff. In July, as most Republicans threw their weight behind Israel, Ms Greene was the only Republican in Congress to label Israel's war in Gaza a "genocide". She also later opposed American air strikes on Iran's nuclear programme. Most recently she has called for an end to the H-1B visa programme for skilled foreign workers that many in the president's entourage support.

Though much of her rise to prominence is the result of Mr Trump's support, Ms Greene touts her political independence. She pointed out recently that she won her first House primary in Georgia without the president's endorsement. "I'm not some sort of blind slave to the president," she said in October.

It is difficult to know exactly what is behind Ms Greene's manoeuvring. It could be disenchantment with how the Republican Party and White House have governed since January. She is, after all, a firebrand, anti-establishment politician. Some Washington insiders point to another motive: revenge. Mr Trump is said to have discouraged her from seeking higher office in 2026, sharing polling that cast doubt on her prospects. But Ms Greene has always shown shrewd judgment in the dizzying politics of MAGA. On the Epstein case, at least, her instincts have been sound. ■

Presidential power

Guarded optimism

NEW YORK

The Supreme Court seems likely to rein in the president's use of the Guard

HURRICANES AND wildfires routinely prompt governors to mobilise the National Guard. But until this year, presidents had federalised Guard troops without a governor's consent only five times. In 2025, 60 years after Lyndon Johnson sent troops to protect civil-rights marchers in Alabama, the script has flipped. Donald Trump is turning to the Guard not to defend protesters but, ostensibly, to protect federal personnel from protests against his policies.

Most courts considering the question have been sceptical of Mr Trump's interventions in Los Angeles, Portland and Chicago. (He has also deployed troops in Washington, DC, where his authority is clearer, and in Memphis, Tennessee, where the governor is amenable.) With all briefs now in hand for the Supreme Court's turn at *Trump v Illinois*, the president may find the justices similarly unconvinced.

In October Mr Trump ordered about 700 of the National Guard—300 from Illinois and 400 from Texas—into federal service. Citing violent demonstrations near Chicago's immigration-enforcement facilities, he invoked Section 12406 of Title 10, a federal law that lets presidents call Guard units into service when a "rebellion" threatens federal authority and "the regular forces" are "unable to execute the laws of the United States". Illinois's Guard would answer to the Pentagon, not to J.B. Pritzker, the state's Democratic governor.

Sightseeing in Washington

Mr Pritzker balked, insisting that state police were keeping order and accusing the White House of manufacturing a crisis. Illinois, joined by the city of Chicago, sued in federal court to stop the deployment. On October 9th a district-court judge blocked both the federalisation and troop movements. With the troops in limbo but racking up millions of dollars in expenses, the administration sought an emergency stay from the Supreme Court.

The government's application had a familiar ring: courts may not substitute their own judgment for the president's on military matters. The Seventh Circuit's decision to the contrary "deprives DHS [Department of Homeland Security] officers of the protections that the president sought to give them from ongoing violence" and places the appeals court "in the untenable position of controlling the military chain of command and judicially micromanaging the exercise of the president's commander-in-chief powers".

In response, Illinois contends that Mr Trump's move is political theatre disguised as law enforcement. The protests in Chicago, though noisy, are constitutionally protected and well short of "rebellion": they "have drawn only small groups", the brief reads, and "never hindered the continued operation of the ICE [Immigration and Customs Enforcement] facility". Illinois also says Mr Trump's commandeering of the National Guard usurps the state's police powers under the Tenth Amendment.

The Supreme Court has not faced a question like this since *Martin v Mott* in 1827, a case that found courts could not second-guess a president's decision to summon the militia. The government calls *Martin* a "seminal decision" that "squarely controls" *Trump v Illinois*. Illinois notes that *Martin* was rather different. It involved a "delinquent militiaman" challenging his court-martial on the ground that James Madison had wrongly federalised the militia to fend off a British invasion. That is quite different, Illinois says, from a sovereign state resisting an imminent domestic deployment within its borders.

If Mr Trump loses his emergency appeal, what then? He has hinted that he could deploy military forces under the Insurrection Act of 1807. But that path is strewn with even greater obstacles. The Department of Justice has long maintained that the law applies only when state authority has collapsed entirely—a far cry from Chicago, where local police have managed a few hundred mostly peaceful protesters without difficulty.

In Mr Trump's second term the Supreme Court has given the president a series of green lights when he has tested the limits of his office. But in *Trump v Illinois*, the justices may remind him that not every protest is a rebellion. ■

Public policy

If wonks ruled

NEW YORK

Lowering health costs need not be hard

HEALTH-CARE DEBATES, particularly about subsidies for insurance coverage, were one reason for the government shutdown. But since it ended on November 12th, the debates have not quieted. Donald Trump proposed a new cash-in-your-pocket health policy, writing on his social media site that rather than subsidising "BIG, FAT, RICH INSURANCE COMPANIES", the government should be "SENDING THE MONEY DIRECTLY BACK TO THE PEOPLE". Republicans in Congress are rushing to flesh out this idea, which risks upending the insurance market. Before they do that, they might consider some smaller-scale reforms to curb health-care spending growth, which exceeds the rate of inflation. The savings could be impactful, and there are three places to start.

The first would be to even out how much Medicare, the government insurance plan for the elderly, pays doctors for procedures. Currently, if a patient has a procedure at an outpatient facility, the hospital gets more than if the same treatment took place at a doctor's office. This was originally intended to help with running costs, but has since grown to be a wasteful cash-cow. The Congressional Budget Office, a non-partisan scorekeeper, has previously estimated that equalising payments by location could save anywhere from $5bn to $156bn over ten years, depending on what was covered. In comparison, keeping the expanded Affordable Care Act subsidies, as Democrats would like to do, would cost $350bn over the next decade.

This change would not just benefit Medicare. "There would actually be even larger savings for commercial payers", like employers who provide insurance, says Christopher Whaley, a health-policy researcher at Brown University. Most insurers use Medicare's pricing to set their own and so plans would have a mandate to bargain harder with hospitals (see chart).

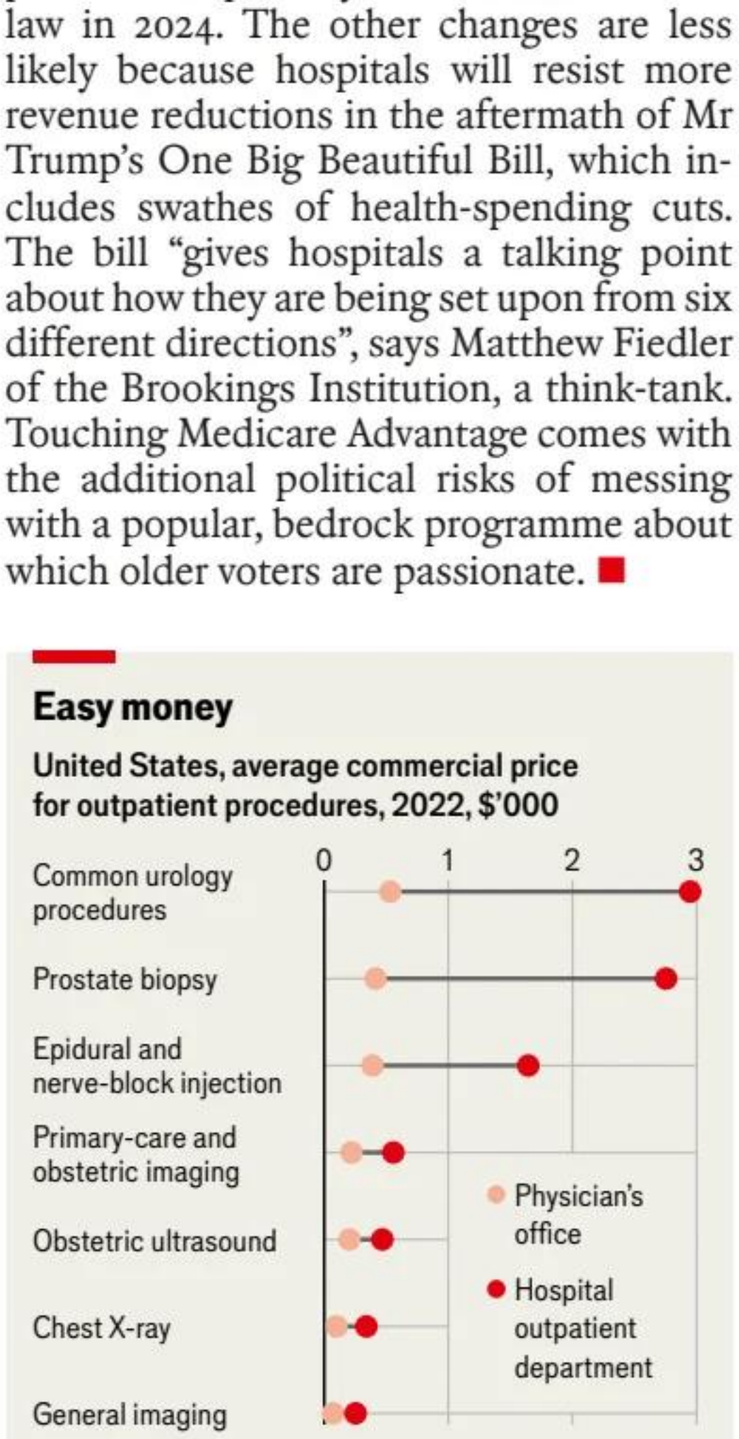
A second area ripe for reform is Medicare Advantage, privately provided Medicare plans. These plans have been growing in popularity: more than half of Medicare beneficiaries now use them, compared with a quarter in 2010. They often provide appealing vision, hearing and dental benefits. But they end up costing the government more, despite typically having healthier enrollees. Insurers get higher payments when people are sicker, which pushes plans to make people appear sicker than they really are. Covering someone under Medicare Advantage costs 20% more than covering the same person under traditional Medicare, which resulted in $84bn in additional government spending in 2025. Reforms could make it harder to present patients as sicker. How much changes could save would depend on the ambition of the reforms: a recent CBO report estimated potential savings at anywhere from $124bn over the next ten years to over $1trn. The White House has some options to enact changes through the administration of Medicare, but that path would likely be highly litigated and the scale of savings available would be limited.

A third opportunity involves pharmacy benefit managers (PBMs), middle-men between chemists and drugmakers. They are supposed to help wrangle discounts for insurance plans and steer people towards cheaper medicines. But PBMs' opaque pricing and business model has led critics to argue that they are keeping too much of the discounts for themselves. Nearly two dozen bills were introduced in the last Congress trying to change various aspects of PBMs. By increasing transparency, policymakers hope employers would be able to wrestle better prices out of PBMs, says Nicholas Bath at Manatt, a consulting firm. The savings are unlikely to be huge, but they would benefit many Americans.

This is the reform most likely to happen: a transparency rule almost became law in 2024. The other changes are less likely because hospitals will resist more revenue reductions in the aftermath of Mr Trump's One Big Beautiful Bill, which includes swathes of health-spending cuts. The bill "gives hospitals a talking point about how they are being set upon from six different directions", says Matthew Fiedler of the Brookings Institution, a think-tank. Touching Medicare Advantage comes with the additional political risks of messing with a popular, bedrock programme about which older voters are passionate. ■

Easy money

United States, average commercial price for outpatient procedures, 2022, $'000



Source: Blue Health Intelligence

Jeffrey Epstein

The files

WASHINGTON, DC

What Congress has voted to release

IT IS THE scandal that will never die. For more than six years the case of Jeffrey Epstein, a dead sex offender with links to the president and other prominent figures, has spawned a dizzying array of conspiracy theories. On November 18th American lawmakers passed a law compelling the government to release its files on Epstein. The bill has been signed by the president. Yet what exactly are the Epstein files, and what can the public expect to see?

The largest batch is held by the Department of Justice (DOJ) and encompasses two criminal investigations that unfolded between 2006 and 2019. The first involved charges that Epstein abused dozens of underage girls in Florida. That case led to a controversial plea deal in 2008. Other DOJ files accumulated during a second investigation that did result in a trafficking charge in July 2019. The department also holds information about Epstein's apparent suicide the following month while in federal custody.

Federal agents amassed documents from property seizures as well as detailed witness interviews. A July memo from the DOJ noted that it had some 300 gigabytes of data and physical evidence, which included a large volume of images and videos of Epstein's victims. The files also contain reams of internal DOJ communications.

Yet the narrow focus of the criminal investigations may disappoint those expecting damning new revelations about Epstein's associates. "What's crucial [in these cases] is what happened to the women, and not what people happen to be connected to Epstein," says Jeremy Paul, a law professor at Northeastern University.

If the DOJ files are released, information about Epstein's victims is likely to be extensively redacted. The DOJ can also withhold any documents that could jeopardise ongoing investigations. (Mr Trump recently ordered the department to investigate prominent Democrats associated with Epstein.) For those podcasters and politicians who believe withholding documents is evidence of conspiracy, there will be plenty to talk about.

Classroom tech

Learning like the ancients

NEW YORK

A backlash against digital tools is reviving written and oral exams

A CENTURY AND a half before Apple marketed iPads to schools, in 1857, a Greek-born Harvard professor, Evangelinus Apostolides Sophocles, held a bonfire of newly introduced "blue books", bound exam booklets for pen-and-paper tests that (to his ire) were to replace oral recitations. He lost. These booklets would torment generations of American students before yielding in turn to computerised testing. But now the blue book is making a comeback, with booklet sales more than doubling from 2022 to 2024, according to Circana, a data firm. And oral exams appear ripe for revival, too.

From high school to university, teachers are playing defence against classroom tech that enables cheating and foments distraction. Laura Lomas, a literature professor at Rutgers University, now requires students to attend a play whose ending changes every night, so she knows if they were there. She assigns oral presentations rather than more AI-friendly PowerPoints, and allows no bathroom breaks during blue-book exams so students can't peek at their phones. Sara Brock, a high-school English teacher in Port Washington, New York, requires students to write exercises by hand in class. Justin Reich, director of the MIT Teaching Systems Lab, says his daughter's middle school has "more or less given up on [assigning] homework other than math." Students are told to read instead.

Such retrenchments are likely to keep spreading. In a 2023 survey by Intelligent, a research outfit, 66% of high-school and college instructors said they were changing assignments because of ChatGPT; of those changing, 76% required or planned to require handwritten work. And 87% said they require or plan to add an oral presentation component. A survey the same year by EdWeek Research Centre found that 43% of educators think students should solve maths problems in class using pencil and paper to show they are not using AI. And in a Stanford University pilot programme, proctors—how quaint!—prowl classrooms to monitor test-taking.

The battle for and against classroom tech in America is raging in other rich countries, notes Isabel Dans Álvarez de Sotomayor, an education scholar at the University of Santiago de Compostela in Spain. As poorer countries race to digitise, richer countries are restricting classroom tech even as they invest in more digital infrastructure. After initially going all-in on technology, in 2023 Sweden banned digital tools for young children and now emphasises physical textbooks, handwriting and reading. Schools in Denmark and Finland are on the same page.

The reason is not just ChatGPT and the mass cheating it makes possible. Teachers are worried about mass distraction as well. In 2025 56% of educators said laptops, tablets or desktops are a major source of diverted attention, according to another EdWeek Research Centre survey. At Bowdoin College, a private liberal-arts college in Maine, the dean says that "many faculty had already marked their classrooms as, for the most part, device-free spaces" even before "the recent ubiquity of AI".

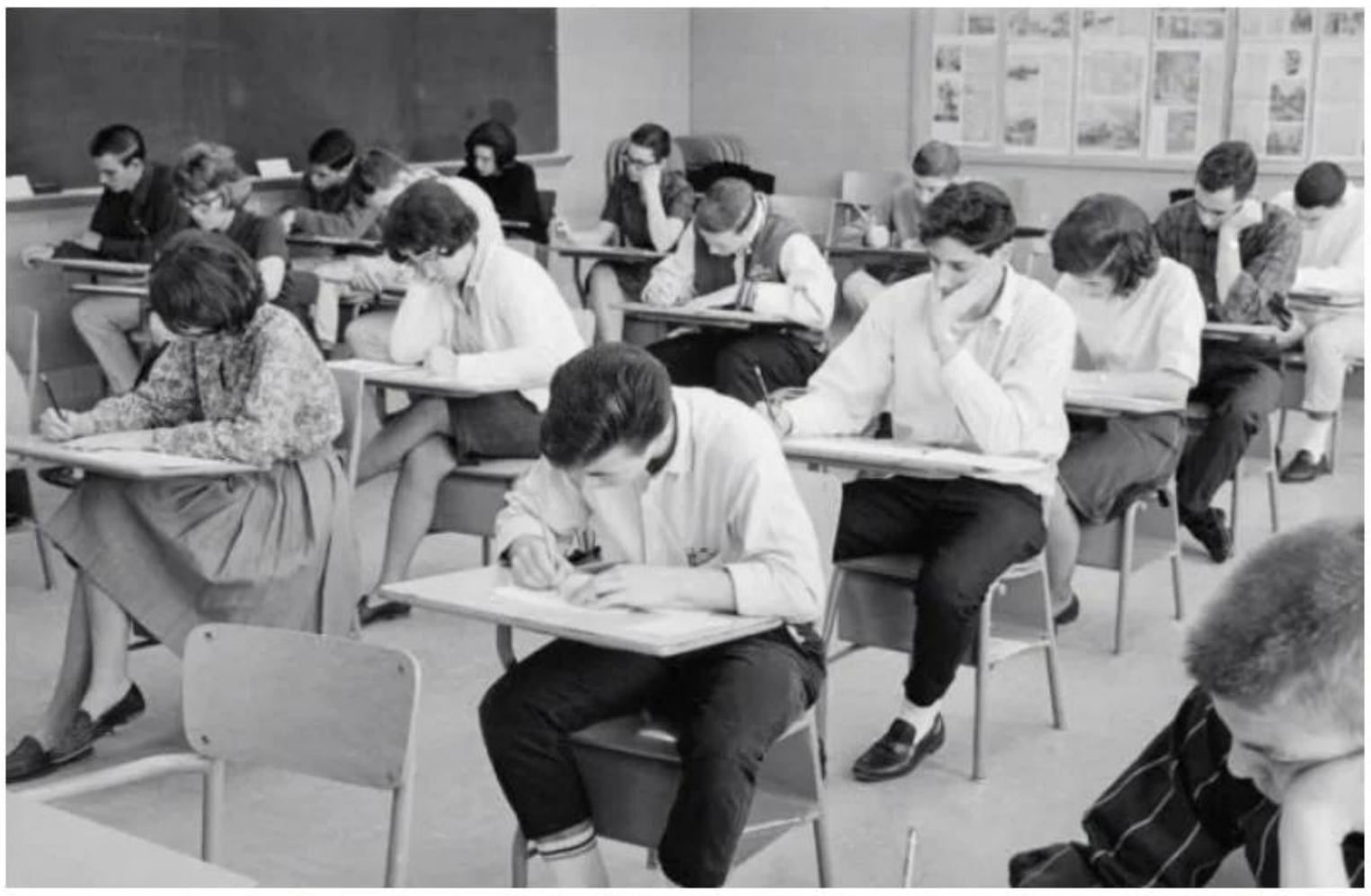
Cheating is nothing new—in a study ten years ago, 87% of high-school students admitted to cheating at least once the month before, and the researchers found that percentage has actually come down since—but the "magnitude of cheating is substantially different" since advanced AI arrived, says Mr Reich of MIT. "We have a zillion interviews with kids of all kinds who say things like, 'In my senior year [of high school] I never did homework. Every assignment I did used generative AI.'" The college level is no better, says Ms Lomas. "One student even quoted a paper by me that AI made up out of thin air".

Rigorous studies have shown that classroom tech can help pupils learn algebra, but evidence of improved outcomes in other areas is thin. By contrast, the benefits handwriting offers for cognition are gaining new respect, even beyond the humanities. A computer science teacher at Hunter College High School in New York recently reinstituted handwriting for coding assignments because it helps with retention as well as critical thinking.

But not everyone who wants to go old-school can. Parents often can't easily opt out of edtech. And Derek Vaillant, a history professor at the University of Michigan, says that while there is a consensus that teachers need to "get back to basics" by prioritising original, in-person, pen-and-paper exams, large public universities are not providing resources commensurate with the challenge by hiring enough teaching assistants. Administrators are "speaking out of both sides of their mouths".

Among parents, it is the affluent and educated who want less tech in the classroom, says Anne Maheux of the University of North Carolina at Chapel Hill, who studies adolescent tech use. A Pew Research Centre report in December 2024 found that 58% of Hispanic and 53% of black teenagers reported being on the internet almost constantly, compared with 37% of white teenagers. The digital divide, she notes, has flipped.

The changes require rethinking the purpose of time in the classroom. At Hunter, an 11th-grade English teacher assigned five literature responses to be written by hand, each taking up a whole period. In the past that was not considered a good use of a teacher's effort, says Mr Reich. But today, with digital "heat-seeking missiles" soaking up attention, "maybe the best thing we can do in the classroom is give young people the gift of quiet, undistracted time." ■



The latest in edtech

LEXINGTON

Say it ain't Joe

Donald Trump has started down the same path as Joe Biden

CAN YOU cast your mind back to when the presidency of Joe Biden was young and full of hope? It may not be easy, given the distracting din of Democratic teeth still gnashing about his leadership. Yet only four years ago his administration was being hailed as extraordinary, maybe on a par with that of the most transformational Democrat, Franklin Roosevelt.

In his first 100 days Mr Biden issued more important executive actions than any president since Roosevelt and, to combat the crises he faced, won authority from Congress to spend more money than Roosevelt did for the emergencies of his time. He distributed vaccines against covid to 200m people. Fully 59% of Americans approved of the job he was doing. Marvelling at Mr Biden, political and academic eminences saw a revival of Roosevelt's joyful spirit and his ideal of activist government. By August *Politico* was reporting that "the impulse to compare the two men has become commonplace in Washington."

Even after the disastrous withdrawal from Afghanistan at the end of that month, when public approval of Mr Biden turned negative on net, never to recover, his ambition did not flag: he was still out to enact a new vision of American industrial policy, to overcome the climate crisis, to bring racial inequities into historic balance. Despite the slimmest of Democratic margins in Congress, only the Supreme Court seemed able to blunt his agenda. That no red wave came ashore in the midterms helped Mr Biden keep his grip on his party. But his greatest source of strength became fear—not of him, but that a primary challenger, or even criticism or dissent, would only weaken him in the next general election. That is why some of the most ambitious Democrats stuck by him even after his catastrophic debate. It all seems a bit mad, in retrospect.

The saga of Joe Biden is a reminder that the story of a president in the first year is never the same in his last. (Or the same as the story becomes decades later, when the revisionists get to work.) Americans have been demanding dramatic change since the century began, but have recoiled when presidents delivered their versions of it. That does not mean the latest president to overreach, Donald Trump, is heading down the same path. But he may be. Indeed, he has been down this darkling lane before. "We are very, very close to being able to ignore Trump most nights," the right-wing media figure Tucker Carlson texted an associate as Mr Trump's first term was stumbling to an end. "I truly can't wait."

In neither of Mr Trump's terms has the public ever approved of him nearly as much as it sometimes did of Mr Biden. This term Mr Trump has already again plumbed the depths of Mr Biden's approval (37% in the Gallup poll: Mr Biden took more than two years to fall that far before recovering slightly; Mr Trump got there in July, before drifting up, to 41%). Mr Trump has been far busier and more "transformational" than Mr Biden. He has greater strength as a communicator and unmatched ruthlessness, or shamelessness, in applying power. Still, Mr Trump is making the same sorts of mistakes, beyond interpreting a narrow victory as a mandate for radicalism. The political bill could come due sooner since, skilled though he is at scaring Republicans, he cannot run again.

The most obvious mutual mistake, as has been widely noted, is denialism about inflation. Mr Biden called it temporary. Though Mr Trump experimented in April with hard truths about tariffs, saying children should be satisfied "with two dolls instead of 30 dolls", he has generally insisted tariffs do not cause inflation, that, in fact, he has defeated inflation, prices are falling and "we have the greatest economy we've ever had". Such Trumpian bluster often works. But in this case his whoppers are falsified in the daily lives of Americans and by the increasingly frantic efforts of his administration to bring prices down, including by cancelling tariffs. In *The Economist*'s composite tracker of polls, Mr Trump's net approval on inflation and prices is 33 points to the negative.

On his signature issue, immigration, Mr Trump is committing his own version of Mr Biden's mistake, extremism. Mr Biden lifted most of Mr Trump's restrictions and then ignored the border for two years. Mr Trump started out with broad support for mass deportation, but polling suggests most Americans are unhappy with the brutal tactics of his growing force of border agents. Even Mr Trump himself has objected to some raids, prompting the sort of speculation that continues to this day about the Biden White House: does the president know what's going on? Is his policy actually being formulated and executed by his most radical aides?

The dude abidens

At 79 Mr Trump seems more active than Mr Biden ever was as president. And in his first term he concealed a perfectly routine medical procedure, a colonoscopy, out of a sense of personal dignity. So there may be nothing that should concern anyone about the MRI he had in October of a part of his body the White House has declined to disclose. Or perhaps that storyline could have a dismal twist in store, as was true for Mr Biden—one that would leave Republicans fuming, as Democrats still do, over the president's stubbornness about holding on to power.

Mr Trump had reasonable concerns about how Mr Biden's relatives enriched themselves through his service. Yet the Trump family is making the "Biden crime family" look small-time. Whether or not Mr Trump is proven to be bidding out pardons, it is hard to imagine even a revisionist eventually celebrating the many ways he openly capitalises on the presidency, such as spritzing a flinching foreign leader in the Oval Office with the perfume he hawks, as he did this month ("It's the best fragrance," Mr Trump said). Mr Trump has time to correct his course. More probably, he will try to install a worshipful successor. But in the end, any successor will have a story all their own they want to tell. ■

The Americas

Cuba

In need of an upheaval

HAVANA

Without a reformer emerging from within the ruling Communist Party, the country faces even deeper misery

IT IS HARD to fathom how ordinary Cubans nowadays manage to survive. The barest necessities of life cost far more than the official average monthly wage of 6,506 pesos (equivalent to $14.46 at the informal rate, which everyone goes by). Most professionals, such as doctors and teachers, exist on that meagre amount. Lower down the scale, cleaners and museum attendants get 2,500 pesos, worth barely $5. Yet a carton of 30 eggs costs 2,800 pesos, more than a month's salary for many. A kilo of rice and a kilo of beans, the Cubans' staple diet, cost 650 pesos and 300 pesos respectively, together worth about ten days' earnings for the low-paid. The UN'S World Food Programme, more accustomed to fending off starvation in Africa, now helps keep Cuban children alive.

The burdens of daily life are excruciatingly hard to bear. In the sweltering heat, electricity goes on the blink in most places for at least four hours a day and in some areas most of the time. Fans and air-conditioners are often off. In many places water is off too, so drinking, cooking and washing, let alone showering or even flushing a toilet, are frequently impossible. According to the Social Rights Observatory, a Spanish-backed think-tank, 89% of Cuban families "live in extreme poverty"; 70% forgo at least one meal a day; 12% of those over 70 go on working after retirement to survive, because 58% of them earn less than 4,500 pesos a month (around $10); only 3% of Cubans can get the medicine they need at pharmacies.

Public transport has all but vanished; buses are few and far between: gaggles of people try thumbing lifts; owners of cars often cannot find or afford petrol; service stations are frequently out of action; drivers can wait more than a week for a rationed allocation of 40 litres at a cost of $46, several times their monthly wage; state petrol stations often insist on payment only in dollars. As you drive 150km west from Havana along an arterial motorway to Pinar del Río, a provincial capital, there is an eerie dearth of traffic.

Millions of Cubans depend on remittances from some of their 3m-plus relatives abroad. Or, increasingly, they join the private sector, once reviled by the Communist Party, where wages are said to be usually at least eight times those paid by the state.

Or, most telling of all, they emigrate. By some calculations, around a quarter of Cuba's 11.2m people, the last census's total still cited by officials, have cleared off in the past five years (see chart 1 on next page). According to that same Spanish survey, 78% of Cubans still want to leave or know someone keen to do so. A leading Cuban demographer, Juan Carlos Albizu-Campos, reckons that 2.75m have left since 2020, including around 788,000 last year. (This year the flow to the United States may have slowed, since Donald Trump reversed the longstanding open-arms welcome previously given to Cubans; he has begun detaining and deporting some illegals.) Moreover, the fertility rate has slid to ▸▸

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30 Saving the Galápagos

30 Venezuela under pressure

a dismal 1.29 children per woman.

Much of the professional class has left. Last year the number of family doctors fell by more than half. Even the corps of the much admired national ballet, where the standard monthly wage was around 5,000 pesos, has been halved by the exodus. A Western diplomat says that "Most Cubans with get-up-and-go have got up and gone." So a manpower hole is gaping at the heart of Cuba's economy. A recent survey of labour productivity in Latin America and the Caribbean by ECLAC, a UN research outfit, put Cuba at rock-bottom of 28 countries, below even chaotic Haiti (see chart 2).

The economy is flat on its back. Almost nothing works efficiently. Cuba was once one of the world's leading sugar exporters; the latest figures show output is now the lowest in over a century, so the country must import it. Fidel Castro, who ran the show from the revolution in 1959 until 2008 (he died in 2016), once ordered the sugar-millers to hit an annual target of 10m tonnes; in 1989 they reached 8m. In the 2024-25 harvest a derisory 150,000 tonnes will have been achieved.

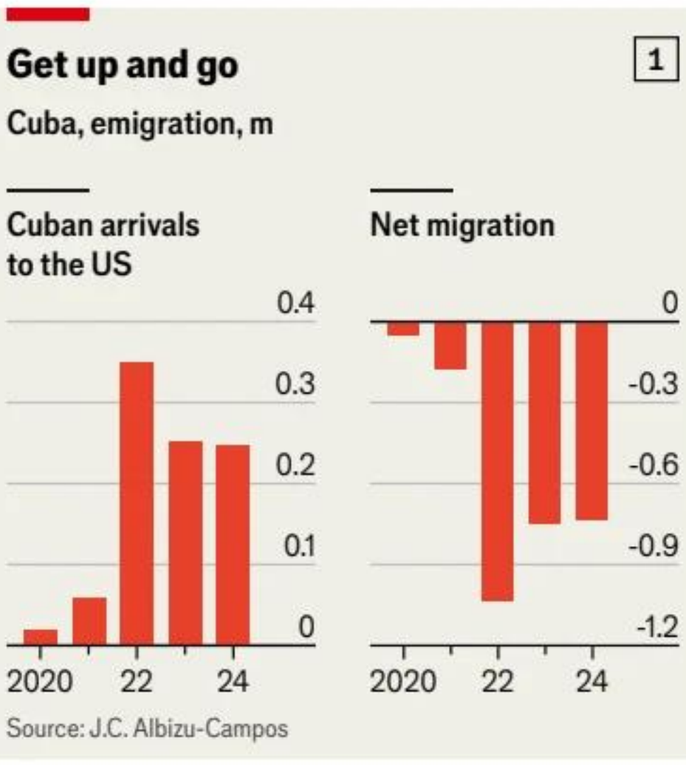
Tourism, once a pillar of the economy, has collapsed. In the wake of President Barack Obama's dramatic visit to Cuba in 2016, tourists flocked in. But after the covid-19 pandemic the industry never recovered. Big hotels are largely empty.

Destitution and dereliction in central and old Havana are palpable. State-run shops have little to sell. In the middle of the day listless people of all ages lounge in doorways. Apart from a fancily restored quarter around the finest of the old plazas, the squalor of the potholed streets, with broken pavements and piles of rubbish, is accentuated by the haunting reminders of past elegance. Once-ornate 19th-century buildings are now filthy and delapidated.

Inflation, officially measured a year ago at 27%, has hovered at around 15% since July. The peso in the open market has dived from around 20 to the dollar in 2019 to around 450 today, as tracked by El Toque, a platform run by Cuban journalists and bloggers in exile. The economy minister admitted in July that the economy had shrunk by 11% since 2019.

Amid the gloom, the sole glimmer of light is the rise of private business. A change in the law in 2021 to allow the creation of 11,000 small and medium-sized firms has been a game-changer, says Ric Herrero, a Cuban-American who runs the Cuba Study Group, a research and advocacy outfit based in Washington that promotes economic and political engagement with the island. Recent figures suggest that private firms, with a permitted maximum of 100 workers, account for 55% of the retail trade and employ a third of the workforce.

The government seems unable to make up its mind whether merely to tolerate private business or to encourage it. The Castro brothers (Raúl ruled for another decade after Fidel retired in 2008) both despised it. But nowadays it is crucial in keeping Cubans alive. "The Communist Party has no choice but to let the private sector thrive because it feeds the country and employs people," says Ricardo Zúñiga. Mr Zúñiga, an American, advised President Obama during the hopeful period after 2015 when a modest engagement and a softer mood between the countries took place. The Cuban regime was then persuaded to nudge the door to private business cautiously ajar.



Grab that greenback

A bitter irony for the dwindling band of Cubans who still believe in the revolution is that the dollar is indisputably king: those Cubans working for private businesses, almost entirely dollar-denominated, are now vastly better off than those ailing in state-run peso penury. Few Cubans seem to blame America's embargo ("the blockade", as officials call it) for their plight, though clearly it adds to it.

But private businesspeople are constantly frustrated by the government's lack of clarity in interpreting the law and its persistent suspicion of free enterprise. "Everything has to be done in a roundabout way," says Marta Deus, a leading entrepreneur who runs a tax-and-legal advisory service and founded a delivery firm called Mandao that has 200,000 users on its app. "Everything is unclear. Nobody knows the rules. We're waiting for change. But it's like the government is living in another world."

Above all, the government is terrified that if the private sector spreads its wings and lets in foreign capital, the system will be overwhelmed, first economically, then politically. "When you see the first McDonalds in the Plaza Vieja [Havana's iconic old square], you'll know the revolution is over," says a seasoned Brazilian observer. "They're still too paranoid to open up," says Mr Herrero. "They see private business as a worms' nest that'll infiltrate and destabilise the country and end up running the [Communist] Party out of town."

So far, no Mikhail Gorbachev, who tried to reform the same sort of system in the Soviet Union, has arisen. Occasionally over the years a would-be moderniser has edged into the daylight, only to be dispatched into the wilderness (or to "Plan Pyjama", as locals jokily call it). Raúl Castro, now 94, is still influential behind the scenes and said to be adamantly against diluting the Marxism-Leninism enshrined in the constitution. Miguel Díaz-Canel, aged 65, who succeeded Raúl as president in 2018, is considered a dull figurehead.

A patchy underground opposition is feeble and fragmented. The permitted press and TV are supine. Social media are less easy to control, but bloggers and online activists are closely watched and locked up if they become too popular or outspoken. There is no coherent or credible alternative movement at home or in Miami, no Mandela figure waiting in the wings or in prison. The last big nationwide wave of protests, in 2021, was rapidly crushed, with hundreds sent to prison. A Miami-based human-rights monitor says 1,196 activists are behind bars.

Some Cubans look to the United States for salvation. But Donald Trump's attitude is hard to discern. When he looks south, Venezuela is his bigger target. Many Cuban-Americans, such as Mr Herrero, have long argued for a wider engagement with Cuba. So far they have lacked representation in Washington, but a younger generation may be more open to the argument that isolating Cuba for more than half a century has plainly failed.

Meanwhile, the country is facing ruin, with a government paralysed by its own contradictions and a people apparently too exhausted to rise up and overthrow it. "This system is so screwed up it's unfixable," says a 52-year-old taxi driver who would leave if he didn't feel obliged to look after his sick mother. "All you can do is get rid of it and start all over again." ■

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The Galápagos Islands

Paradise overrun

SANTA CRUZ

Can a higher fee save the archipelago from its visitors?

MORE THAN a dozen islands, formed millions of years ago, rise out of the Pacific Ocean 1,000km (600 miles) from Ecuador's coast. Since 1959, 97% of the islands' surface area has been designated a national park, to preserve rare animals and plants. Welcome to the Galápagos.

That sense of sanctuary is fading. In 2024 the archipelago received 279,300 visitors—ten times the number of locals, and six times the tally in 1993. On the main islands, where most arrivals concentrate, crowding has become hard to ignore. Rubbish on trails and foul air due to poorly managed sewage strip away much of the idyllic charm that inspired Charles Darwin to develop his theory of evolution.

Last year Ecuador's government responded. Entry fees, unchanged since 1998, rose from $6 to $30 for Ecuadorians, and doubled to $200 for foreigners. Ecuador is right to charge a fee akin to Disney parks in the United States, says Guillermo Lasso, a former president.

A year later, has it improved the situation? Evidence so far suggests the rise in fees has not deterred visitors. In the first half of 2025 the islands had 2,803 more tourists than in the same period the year before. That may suit Ecuador just fine. Its government is as interested in raising money as it is in reducing harm to the environment. It plans to spend it on conservation and improving the islands' infrastructure, which is shoddy.

In 2024 park revenues reached a record $22.1m, 23% higher than in 2023. In 2025 officials expect takings to reach $39.6m. The United Nations Educational, Scientific and Cultural Organisation (UNESCO), which lists the Galápagos as a world heritage site, has praised the fee rise as "effective". But critics say the money is poorly spent and seldom benefits locals.

Islanders, too, want tourism to continue—but on different terms. More than four-fifths of Galapagueños depend on the industry to cover living costs, which are around 80% higher than on the mainland. But growth has brought few gains to local people. "I want to fix the roads, ensure water—nothing extraordinary," says Rolando Caiza, mayor of San Cristóbal island.

They also want to prevent the islands from drifting towards the kind of overdevelopment seen in other once-exotic destinations. Mr Caiza points to Cancún and Hawaii as cautionary tales. Some locals are offering trips that go beyond the coast, such as guided treks up volcanoes and agrotourism in the largely unvisited highlands. Jackeline Murillo hopes to lure visitors to her farm to glimpse rural life.

Taxing times

There is reason to hope such efforts will succeed. In 2007 UNESCO put the Galápagos on its endangered list, citing invasive species, illegal fishing and uncontrolled development. The government responded by capping the number of visitors, tightening inspections of cargo, and requiring permits for tourism construction.

In 2010 the islands were removed from the list. Mateo Estrella, Ecuador's tourism minister, says the current problems are serious, but manageable. "I don't think it will happen again," he insists. ■

Venezuela

War and peace

CARACAS AND WASHINGTON, DC

Donald Trump may want to talk to, or oust, Venezuela's dictator

WHAT DOES Donald Trump want from Nicolás Maduro, Venezuela's strongman? As the *USS Gerald R. Ford*, a giant aircraft-carrier, entered the Caribbean on November 16th the administration said it would designate the Cartel de los Soles, which it alleges is headed by Mr Maduro, as a Foreign Terrorist Organisation (FTO)—with effect from November 24th. Mr Trump has refused to rule out the use of force, even leaving open the possibility of a ground invasion; yet at the same time he has floated the idea of talks. "We may be having some discussions with Maduro," he said. In response Mr Maduro, who stole last year's presidential election, said he would be willing to talk "face to face, without any problem".

A deal that would sate the Trump administration and leave Mr Maduro in power is difficult to imagine; so is Mr Maduro voluntarily stepping down. Much depends on what Mr Trump thinks is the best way to get a headline-grabbing win: a deal secured through gunboat intimidation, or dramatic but limited strikes to unseat—or even kill—Mr Maduro.

The FTO designation bolsters both the political and perhaps the legal case for strikes in Venezuela. It frames what is essentially a campaign for regime change as a counter-terrorism and counter-narcotics operation, says Brian Finucane of International Crisis Group, a think-tank. Earlier this month the administration is said to have told Congress that it lacked the legal authority to strike Venezuela. Now Mr Trump is implying that the new designation allows him to do just that. Plenty disagree. "The designation means nothing under international law," says Mary Ellen O'Connell of the University of Notre Dame in Indiana.

There is little evidence that the Cartel de los Soles is an organised gang run by Mr Maduro, though parts of the Venezuelan armed forces are involved in drug trafficking. Still, the designation will make it a crime to provide money or services to the group. That could affect foreign firms that do business with the Venezuelan state. The administration has conspicuously refrained from declaring Venezuela a state sponsor of terrorism, which is the bigger worry for companies such as Chevron, an American oil giant.

What any deal might look like remains unclear. A well-placed businessman says the regime doubts Mr Trump will send in the troops. That might limit how much Mr Maduro is willing to concede. Still, in secret negotiations earlier this year the dictator is said to have offered the United States sweeping access to Venezuela's oil and minerals. He may also be tempted to hand over some top brass as drug-trafficking scapegoats, too. Some American officials would surely demand any deal remove Mr Maduro from power. Yet because they insist their focus is drug interdiction, not restoring democracy, that could leave one of his cronies in charge.

Mr Trump is unpredictable. He ordered strikes on Iran's nuclear facilities in June, as talks continued. He could leave his armada in the Caribbean, striking only alleged drug boats or menacing others. He recently said he "would be proud" to bomb drug gangs in other countries, such as Mexico and Colombia. Alas, of the possible scenarios, very few include what most Venezuelans voted for last year: a democratic country without Mr Maduro. ■

Asia

Defending Japan

Sea of troubles

TOKYO

Japan's hawkish new prime minister wants bigger budgets, better spooks and a stronger arms industry

A FEW WEEKS ago a sleek Japanese destroyer, the *JS Chokai*, arrived in California on a special mission: to be equipped with American Tomahawk cruise missiles, the first of hundreds that Japan plans to acquire. The deployment of such long-range weapons, with the ability to fire deep into mainland China and North Korea, marks a milestone in Japan's transformation from a constitutionally pacifist state to a modern military power. It breaks with a long-standing taboo against the ability to strike targets on enemy territory.

If Japan's hawkish new prime minister, Takaichi Sanae, has her way, Japan's security evolution will quicken. The country's military build-up is a response to increasingly aggressive neighbours in China and North Korea and to an ever more unreliable ally in America. The process began in earnest more than a decade ago, following China's confrontation with Japan over the Senkaku islands, which Japan controls and China claims. A fresh diplomatic spat (see China section) has now erupted over Ms Takaichi's support for Taiwan—a reminder of how quickly a crisis between the two Asian giants could get out of hand and of why Japan feels insecure.

The case for picking up the pace is compelling. The late Abe Shinzo, prime minister most recently from 2012 to 2020, charted a more muscular course for Japan. He raised defence spending and loosened laws that restrict the use of force by Japan's armed forces. One of Abe's successors, Kishida Fumio, promoted a strategic review in December 2022 that bucked post-war conventions about how much Japan should invest in its security and what kind of capabilities it should have.

Since then the threats facing Japan have only grown. China has strengthened its armed forces and ramped up pressure around the Senkaku (which it calls the Diaoyu islands). North Korea has revived a military alliance with Russia and expanded its missile and nuclear arsenals. Meanwhile Donald Trump has pressed Japan to spend more on defence; the American president has also fuelled anxiety over the depth of America's commitment to defend its chief ally in the Pacific.

At home, Ms Takaichi has secured a new coalition partner for the ruling Liberal Democratic Party (LDP). The Japan Innovation Party is as keen on security reforms as is the prime minister, in contrast to the LDP's previous partner, Komeito, a pacifist party. Her first order of business is upping spending on defence. Three years ago Japan announced it would raise defence spending to 2% of GDP by early 2028, overriding a long-standing norm against it exceeding 1% of GDP. In reality, some of the accounting is a sleight of hand in which existing spending (on, eg, the coast guard) is newly being counted towards defence expenditure. The prime minister plans to use a supplemental budget to get over the 2% threshold by the spring. Meanwhile, the ▸▸

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LDP's new policy chief, Kobayashi Takayuki, says that "2% of GDP is nowhere near enough"; future defence budgets, he intimates, will be bigger still.

The new funds are largely being spent on expanding the capabilities of the Self-Defence Forces (SDF). As well as Tomahawks, Japan will deploy home-grown long-range missiles on Kyushu, the southernmost of the country's four main islands, next spring. In August Japan fielded its first F-35B, a short take-off version of a top American fighter jet. Since Russia's invasion of Ukraine, Japan has also paid more attention to back-end necessities, including stockpiling ammunition. The invasion, says Yamazaki Koji, who stepped down as SDF chief in 2023, was a "wake-up call that we have to focus on real operations."

Yet Japan's planned spending will not go as far as some at first hoped. The procurement strategy at the time of the review assumed an exchange rate of ¥108 to the dollar, but it has averaged nearer ¥150, giving Japan less bang for its yen when buying foreign kit. Drones, cyber operations and AI are also rapidly changing modern warfare; Japan needs to "catch up with the new way of fighting", says one LDP lawmaker. Nor is Mr Trump likely to accept that Japan's new budget target of 2% of GDP is enough. It all adds urgency to blow past a target that, just a few years ago, would have been barely imaginable.

Meanwhile Ms Takaichi also wants to strengthen the institutional architecture. Abe elevated Japan's defence agency to a fully fledged ministry and created a secretariat modelled on America's National Security Council. Mr Kishida established a new command structure for the SDF to ensure better co-ordination between its branches and with American forces. Ms Takaichi now wants to create a stand-alone national intelligence agency to take over from intelligence-gathering by several government ministries and agencies. On November 14th a new LDP council met to discuss the design of the new outfit.

A last set of changes involves loosening legal constraints. Earlier this year Japan's Diet passed a law authorising the government to take active measures to neutralise cyber threats, thus clarifying how to apply Japan's constitutional prohibition on the pre-emptive use of force in the murky world of cyberspace. Mr Kishida's administration also partially revised the long-standing restrictions on arms exports. Japan is jointly developing a next-generation fighter jet with Britain and Italy; Mitsubishi Heavy Industries, an engineering and defence giant, recently won a big contract to supply Australia with new frigates. Still, limitations on arms exports remained tight enough for both projects to require clunky legal workarounds. Ms Takaichi wants to do away with restrictions entirely.

Japan's positions on nuclear security may be the next taboos to fall. Since the atomic bombings of Hiroshima and Nagasaki, Japanese have been averse to military uses of nuclear power; the law limits the use of nuclear energy to "peaceful purposes". But following South Korea's recent agreement with America to acquire nuclear-powered (but not nuclear-armed) submarines, Japanese officials have expressed interest in such subs too. Their acquisition would not breach the pledge, made in 1967, by the then prime minister, Sato Eisaku, that Japan would not possess, produce or host nuclear weapons on its territory. Yet earlier this month Ms Takaichi hinted that these three sacred principles might be up for review too.

For all the government's ambitions, boosting defence faces enduring constraints. Tax rises were supposed to cover the jump in the defence budget, but their implementation has been delayed. Proposals for further spending are bound to come into tension with providing for an ageing population and with growing calls to tackle rising living costs. Ms Takaichi has already promised tax cuts and subsidies for struggling households.

Japan also severely lacks manpower. Faster defence production will mean shifting workers from assembly lines elsewhere; building a cyber force means poaching programming talent from the private sector, where it is already scarce. This year the SDF fell short of its target of having 247,000 troops by over 10%; among the lowest ranks the shortfall is nearly 40%. Unmanned systems and efficient operations can help, but will not be enough. The SDF hopes that better living conditions will attract more young recruits. As well as equipping them with new weapons, ships will get fast satellite internet for their crews. Soon the *JS Chokai* should have not just Tomahawks, but Netflix too. ■

Criminal networks and their political backers

Scam states

SINGAPORE

Politicians are protecting South-East Asia's huge criminal networks

A STRING OF scandals across South-East Asia is exposing official complicity in vast scam networks, often operated by Chinese triad and other criminal groups and involving trafficked workers. Across the region, tens of thousands of people toil inside buildings surrounded by barbed wire and security cameras defrauding Americans, Europeans and others in an industry that is estimated to steal over $500bn a year from victims worldwide.

Vorapak in happier days

Last month Thailand's deputy finance minister, Vorapak Tanyawong, resigned after allegations surfaced linking him to scam networks in Cambodia. The veteran banker lasted just 33 days in office. He quit after Whale Hunting, an investigative journalism outlet in London, alleged that his wife had received $3m in cryptocurrency from a Chinese-Cambodian criminal network. He denies all allegations, calling them a "smear campaign". As it happens, his boss, the finance minister, had appointed him to lead the country's campaign to track money flows from scam centres.

Nowhere is the scam industry more deeply enmeshed with political and business elites than in Cambodia. In 2020 Chen Zhi, a Chinese businessman who took Cambodian citizenship, was awarded the title of *Neak Oknha,* the highest honour conferred by the king—one that requires a donation of at least $500,000 to the state. Mr Chen has acted as adviser to Hun Sen, Cambodia's longtime strongman, and to his son, Hun Manet, who has succeeded him as prime minister. Last month America seized $15bn in cryptocurrency from Mr Chen, the chairman of Prince Group, which the Department of Justice alleges has become "one of Asia's largest transnational criminal organisations". America has ▸▸

put sanctions on 146 entities and individuals connected to Prince Group, including Mr Chen. Prince Group and Mr Chen deny any unlawful activity.

The moves are America's most sweeping action yet against South-East Asia's huge scam economy. They came a week after a bill was introduced in Congress naming and shaming huge and lucrative syndicates, including Prince Group. The bill also names Sar Sokha, Cambodia's deputy prime minister, as one of the main investors in Jin Bei Group, a luxury hotel and casino complex that allegedly hosts scam compounds run by Prince Group. Sar Sokha denies being a shareholder. Jin Bei denies any illegality. Hun To, Mr Hun Manet's cousin, is also listed in the draft bill, the Dismantle Foreign Scam Syndicates Act. Mr Hun To sits on the board of a subsidiary of Huione Group, the company behind "the largest-ever illicit online marketplace", according to Elliptic, a blockchain-analytics firm. America has barred Huione from its financial system for laundering money for North Korean hackers and Asian crime groups. Mr Hun To denies any involvement in criminal activities.

The Philippines also offers striking examples. There, officials say, online gambling hubs are often a front for money-laundering, human trafficking, kidnapping, torture and murder. Alice Guo, mayor of Bamban, north of Manila, the capital, is now in jail, accused of running a sprawling scam operation with hundreds of trafficked workers. On November 20th she was sentenced to life imprisonment for human trafficking. Last year Harry Roque, a former human-rights lawyer and spokesman for the then president, Rodrigo Duterte, fled the country after being accused of links to a scam hub near Manila. He is now seeking asylum in the Netherlands.

On November 12th America announced a new strike force to fight scams and transnational crime, suggesting it intends to treat these networks as a global security threat rather than as a policing nuisance. Yet it is still unclear how much South-East Asian governments will go after the most powerful interests behind online fraud.

In Thailand the deputy leader of the opposition, Rangsiman Rome, has started to rattle some of these interests with his investigation into elite collusion with scam rings. He recently warned that Thailand "faces serious threats from transnational scammer networks using opaque funds—financial flows that are not outright illegal but move through complex channels to evade oversight, conceal beneficiaries, or gain influence." He also said that without action, "we'll wake up to find the country run by crooks in suits". A reckoning has begun. Yet crime and politics often blur in South-East Asia. The scam economy may shift shape, but it is unlikely to wither. ■

A new approach to development aid

Being antediluvian pays

SINGAPORE

Acting ahead of looming natural disasters can be a powerful tool

THE PHILIPPINES needs to be well prepared. Its islands are hit by 20-odd typhoons a year, not to mention earthquakes and volcanic eruptions. Yet as two storms earlier this month revealed, even with warnings disasters can have devastating effects. Hundreds of people were killed and millions more displaced. It did not help that some funds for flood-control projects have vanished amid allegations of corruption. It has prompted widespread protests in recent days and the resignations of two ministers.

How to respond to disasters is an ever more pressing problem for much of Asia. According to the World Risk Index compiled by the Ruhr-University Bochum in Germany, the Philippines is the most vulnerable country in the world to natural catastrophe. But five other Asian countries are also in the top ten. A changing climate only means more frequent and more intense storms and flooding.

Graft aside, governments in Asia almost always focus on relief and reconstruction after disasters strike. Yet doing so effectively is never easy. The help that eventually comes, whether food or money, is often too little and too late. A growing body of research suggests governments could do much more in advance.

"Anticipatory action" is an increasingly popular policy that hands out assistance (typically cash) before or just as a disaster strikes. Implementation requires early warning systems, a ready-to-disburse pot of money and a ready list of beneficiaries. These get money when a forecast for a flood or typhoon crosses a given threshold of seriousness. The UN's World Food Programme (WFP), which launched the concept a decade ago, believes that by giving help when it is needed most, communities can recover better from shocks.

Studies support that claim. Researchers at the World Bank compared families in flood-prone areas of Bangladesh and Nepal who received cash almost as soon as a flood began with those who received the same amount weeks later. The early recipients fared much better: they were less likely to go hungry, accumulate debt or be depressed. The effects were also long-lasting. Early payments are a "pure welfare gain", the authors write.

In other research, families who receive anticipatory transfers are less likely to resort to costly adjustments, such as selling assets or pulling children from school. In Mongolia, one study found that families who received cash transfers ahead of a *dzud*, a winter disaster in which steppe grass is frozen over with ice, were less likely to experience livestock losses. Anticipatory transfers are also cost-effective. According to the WFP, every dollar spent before a disaster saves up to seven in avoided damage and future emergency responses.

Improvements in satellite data and artificial intelligence are making disaster forecasts more accurate and anticipatory action easier to take. For example, the Flood Hub, a project by Google, uses machine-learning tools to analyse past hydrological and weather patterns to forecast floods in more than 80 countries. Similarly, better payment infrastructure helps with the other crucial aspect of anticipatory action: ▸▸

Super typhoon Uwan's deadly rampage

disbursing money. In South Asia a proliferation of digital wallets, such as bKash in Bangladesh, has made it easier to send money instantly.

Scaling up anticipatory action is still hard. The Anticipation Hub, a global network that tracks efforts, identifies more than 100 projects in 45 countries, reaching 17m people, including across South and South-East Asia. Few of these projects are run by governments; most are led by NGOs or UN agencies, thus limiting their scale. Many governments are reluctant to set aside money on the basis of forecasts. Some worry that cash might be misused—though evidence suggests it largely goes on food and other necessities. Moreover, governments often lack the technology or capacity to build and manage databases of potential victims.

Even in Bangladesh, home to several pilot schemes, anticipatory action remains a nascent concept. A working group within the disaster-management ministry is to explore how anticipatory transfers could be integrated into existing response systems. Abir Chowdhury of GiveDirectly, an NGO running one pilot, thinks that more evidence of such transfers' value will greatly help shape government policy.

Anticipatory action is no substitute for preparing for the longer-term consequences of climate change, by adapting to or mitigating the threats. But though acting early will never stop a storm, it can ensure that fewer lives are shattered. ■

BANYAN

Suharto revived

To glimpse Indonesia's future, look to Prabowo Subianto's view of the past

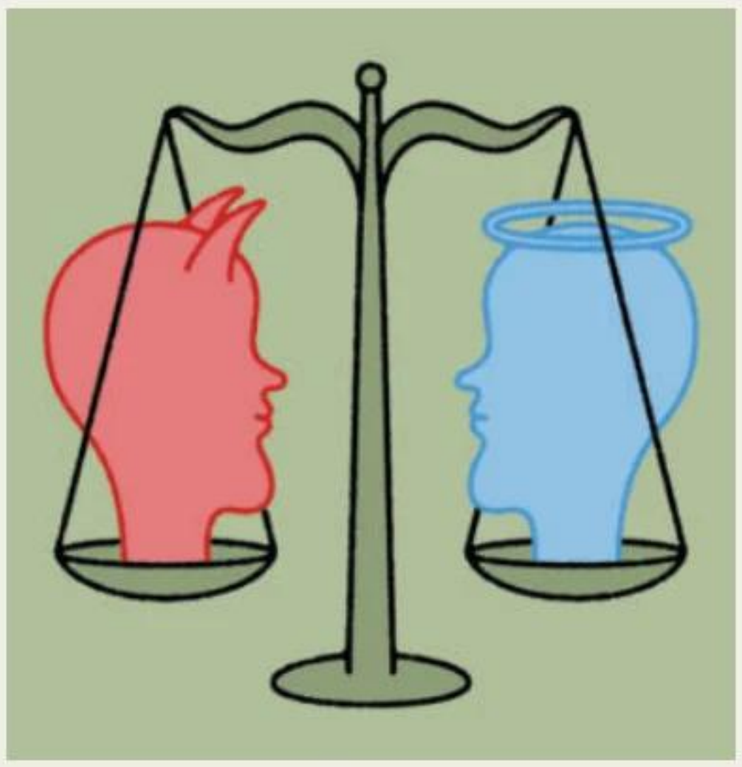
AS THE ASIAN financial crisis swept through Indonesia in 1997, the IMF offered the country a bail-out. It was thought that the loan would help Indonesia to turn the page quickly. After all, Suharto, the dictator since 1967, had long appointed capable (often American-educated) technocrats to run the economy, and the result had been three decades of rapid development.

It had also been a long period of enrichment for Suharto, his family members and his cronies as they reached ever deeper into business, finance and the running of the state and the armed forces. Among other things, the crisis laid bare the extent to which this group had abused the financial system. Despite pleas from the IMF, regulators refused to crack down on corruption. The confidence of foreign investors, once strong, collapsed in early 1998, reversing decades of economic growth, and 36m Indonesians fell back into poverty. Amid protest, unrest and blood-letting, Suharto stepped down.

His departure marked the start of the current, generally happier, era in Indonesia: *reformasi*, or the country's transition to democracy. And so it is notable, and worrying, that on November 10th the sitting president, Prabowo Subianto, formally elevated the late Suharto to the pantheon of national heroes.

The move was not unexpected. Mr Prabowo served as the commander of the crack special forces in Suharto's army. He was, indeed, once married to Suharto's daughter.

Yet there is more to Mr Prabowo's move than a simple whitewashing of the Suharto era. On the same day as Suharto's beatification, the president named several of the dictator's opponents national heroes as well. One is the late



Abdurrahman Wahid, or Gus Dur, a nearly blind cleric who led opposition to Suharto's regime and who was elected president in the first free polls of the post-Suharto years. Another is Marsinah, a labour activist; she was murdered (and her body mutilated) in 1993. None of the soldiers thought responsible has been brought to justice. At a ceremony in the presidential palace in Jakarta, Mr Prabowo handed medals to next-of-kin while the portraits of Gus Dur and Marsinah stood witness.

Mr Prabowo's backers argue that a spirit of reconciliation is behind his big-tent approach to Indonesia's history—they note it could have been a matter of just rehabilitating his late father-in-law. Yet his simultaneous honouring of Suharto's opponents makes the approach far more corrosive than whitewash. By elevating both those who fought for democracy and those who fought to suppress it, Mr Prabowo is in effect flattening Indonesian history, rendering it at best as a kind of bas relief. In Mr Prabowo's particular topography of 20th-century Indonesia, there are no persons of particular moral prominence. All struggles, whether for good or for ill, are honoured alike.

A flattened version of history certainly plays to Mr Prabowo's advantage. His Suharto-era career is littered with abuses. In the final months of Suharto's rule, as students poured onto the streets in outrage over the first family's venality, at least nine of their leaders disappeared, kidnapped and tortured by Mr Prabowo's troops. Mr Prabowo later acknowledged ordering their kidnapping but says they were unharmed—two, his defenders note, even serve as deputy ministers in his administration. But in a separate drive, 13 student activists disappeared and were never heard from again. Mr Prabowo says he knows nothing about those cases. But before he was sworn in as president, his party quietly offered the families of some of the victims around $60,000 each. What was not offered was justice for the killers.

As for Suharto, he never even had to answer for his rule's original sin in 1965-66: the killing of hundreds of thousands of suspected communist sympathisers on his path to power. One of Suharto's top lieutenants in the massacres, Sarwo Edhie Wibowo, was also named a national hero this month.

Most troubling, these moves are not just about the past. The president calls for a governing coalition of all Indonesia's political parties, and has shown that he is willing to use legal coercion to achieve it. All parties would be present in government, but accountability would not. Mr Prabowo might, he muses, even make such a coalition "permanent". That would amount to a return to the authoritarian politics of the Suharto era. Mr Prabowo's move to rehabilitate the late dictator says as much about his plans for the future as it does about the past.

China

Vocational education

Time to get handier

HANGZHOU

China wants more youngsters to develop the practical skills that industry needs

ON THE BANKS of the Fuchun river in Zhejiang, an eastern province, the youngsters who will power China's future are at work. At Hangzhou Technician Institute, more than 6,000 students aged between 14 and 20 are learning how to operate drones, manufacture rare-earth magnets, and maintain electric vehicles and industrial robots. Every year Shao Weijun, its boss, asks more than 600 Chinese firms to forecast their demand for different skills; their answers alter what courses his institute chooses to run. He says almost all his students leave with good jobs.

China is in the midst of a big push for more and better practical training. Around 34m young people are studying in China's vocational-education system. These include teenagers in vocational-track high schools, as well as students in post-secondary colleges that operate in parallel to universities. Yet as in many other countries, China's vocational classrooms suffer from being seen as a sink for unserious students. Learners and parents often see vocational institutions as underfunded and badly run. In many cases they are correct.

The Communist Party has good reasons to want to sort all this out. One is a rising suspicion that China's university sector has grown too big, too fast (see chart, next page). Many clever young graduates are struggling to find work, and around 17% of Chinese aged 16-24 (excluding current students) were unemployed as of October. These include a lot of youngsters with impressive qualifications.

Moreover, graduates are failing to secure employment even as many company bosses complain that they are finding it difficult to hire staff with the skills they need. The party accepts that China is going to need brilliant scientists and engineers if it is to dominate the technologies of the future. But it also recognises that it will need a big army of technicians to keep all its robots, data centres and other bits of gleaming kit running. Ensuring a steady supply of these is essential if China is to achieve the lofty objectives of its next five-year economic plan.

Making plans for Nigel

In 2022 China's government revised its law on vocational education, describing practical qualifications as "equally important" as academic ones. In December 2024 the education ministry announced it was creating 40 new vocational courses for learners at various levels, many relating to whizzy industries such as AI and biomedicine. And in June this year the government launched a campaign to improve the skills of 30m more workers by 2027, particularly those "urgently needed for industrial development" in fields such as deep-sea technology and the "low-altitude economy" (drones, flying taxis and the like).

This latest campaign will notably include efforts to send some university graduates back to college, in the hope that they ▸▸

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will emerge with more marketable skills. Provincial governments in Zhejiang, Shandong, Anhui and others have laid out plans to help China reach its target for 2027; these include retraining programmes for people already with degrees. Students in vocational institutions have long sought to trade up to spots in academic ones, so it is remarkable that traffic is now beginning to flow in the other direction. Though the vocational-to-university path, *zhuanshengben*, has long been popular as a potential track for vocational-college students to apply to start a university's bachelor's degree, some new programmes allow university graduates to pursue technical training in a reverse trend called *benshengzhuan*. A survey by Zhaopin, a recruitment agency, last year found that 52% of university graduates think additional technical training would increase their employment opportunities.

The government has coupled all this with a big propaganda push to convince more people that practical training may make their fortunes. "Once upon a time, the notion that 'white-collar workers are superior to blue-collar workers' was deeply ingrained," noted the *People's Daily*, a party mouthpiece, in July. "But now, as higher education becomes universal, the strong correlation between academic qualifications and employment is breaking down." In August *China Youth Daily*, a state-owned newspaper, quoted an education-ministry researcher calling for a rethink of values that have resulted in "an oversupply of diplomas and a shortage of skills".

A long-term goal for China, as for many other countries, is to lower barriers that keep academic and vocational pathways firmly distinct. Doing this would make it easier for learners to move from one track to the other, or indeed to acquire qualifications that blend elements of both. Chinese officials have increasingly encouraged the creation of application-orientated bachelor's degrees at lower-tier universities, says Gerard Postiglione, an emeritus professor of education at the University of Hong Kong. And more colleges that were once purely vocational are now being allowed to offer some bachelor's degrees.

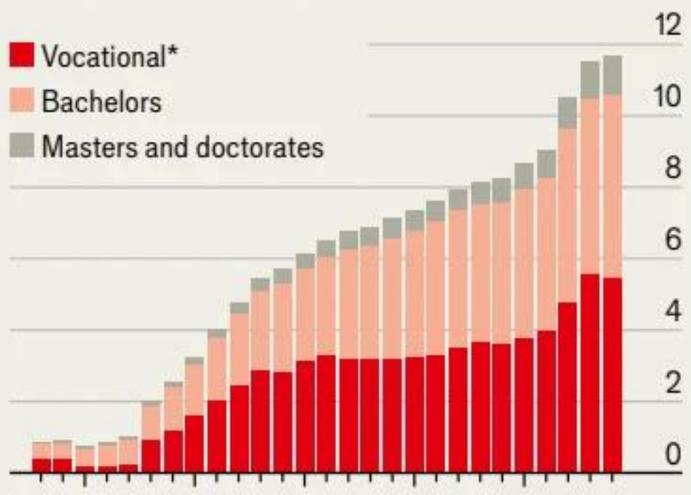
Making your parents proud

Are attitudes on the ground shifting? It depends who you ask. Shen Kecheng is a first-year student of electrical automation at Beijing Polytechnic University. His course is vocational and includes lots of hands-on learning, which he likes; he reckons his job prospects in the aviation sector are good. Nevertheless, he plans to stay in education until he has managed to layer a bachelor's degree on top of it. After all, companies continue to give university graduates priority when hiring, he says.

He Li, a 22-year-old studying at the Xi'an Railway Vocational and Technical Institute, seems more certain of his choice. He says that when his cousin got into a master's programme at a good university in Sichuan province his family threw a party. But after graduating she ended up with a short-term job in a primary school, he says—not at all the pay-off she had imagined. His college is far less prestigious, but it has tight relationships with employers across the country. A good job maintaining subway systems is on the cards. "It's impossible for everyone to be in management or sit in an office," he says. "It's about adapting to the times." ■

Education nation

China, graduates from higher-education institutions, by course type, m



*Includes vocational bachelors since 2022
Sources: National Bureau of Statistics; Ministry of Education

Looking at the loans

Hey, big lender!

HONG KONG

A new analysis reveals just how much money China extends to rich countries

CHINA HAS become one of the world's biggest bankers and donors. But its financial influence overseas is hard to track. Its government has a "transparency allergy", says Brad Parks of AidData, a research centre at the College of William and Mary in Virginia. In 2009 he and his colleagues tried to persuade China's Ministry of Commerce to open up a bit. "Don't you want the world to know how generous you are?" they asked. The ministry was unmoved. "Everyone who needs to know how generous we are already knows," it said.

The researchers, therefore, took a different tack. They scoured media reports for news of loans and grants from China's government and its state-owned creditors. They also tapped official sources in borrowing countries and multilateral institutions such as the World Bank. They have previously published their findings on Chinese financing to developing countries. On November 18th they released a report on its aid and lending to the whole world. The new database covers more than 30,000 projects from 2000 to 2023. It spans rich and poor countries; and private, as well as sovereign, borrowers.

On borrowed dime

China's financial commitments over that period amount to $2.17trn (adjusted for inflation), an enormous sum. Of that total, only 6% qualifies as aid (either grants or cheap loans). Another 3% is hard to classify one way or the other, given the paucity of information available. Poor countries borrowed another $1.02trn (47% of the total) from state-owned creditors (see chart 1 on next page). And high-income countries took the rest (43%). The biggest single borrower, receiving $202bn, was America.

A surprisingly small amount of this money relates to the "Belt and Road Initiative" (BRI), a global lending and investment scheme championed by Xi Jinping, China's leader. Loans for infrastructure under the BRI accounted for only 20% of total Chinese credit in the decade after the initiative was launched in 2013. The BRI was spearheaded by China's state-directed "policy banks", such as China Development Bank and Export-Import Bank of China. But they have become less prominent creditors in recent years, as Chinese lending to poor countries has receded.

That has cleared the stage for China's massive commercial banks, such as ICBC or Bank of China. Owned by the government, but keen to make a profit, they were responsible for about 60% of all lending by China's state-owned creditors from 2019 to 2023 (see chart 2 on next page). In high-income countries, perhaps their more natural habitat, they accounted for more than 80% of such lending.

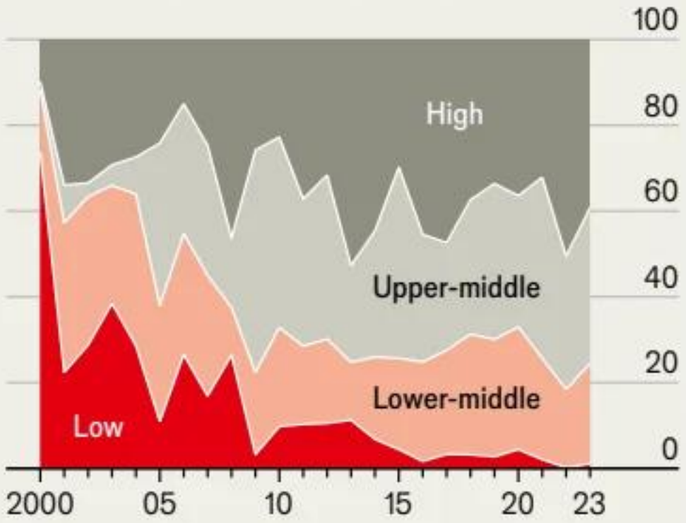
Many of these loans look harmless enough. Lenders such as ICBC or Bank of China have followed their clients abroad, setting up subsidiaries in the world's richest markets. They also chip in to syndicated loans alongside other global banks. In 2012 Bank of China joined JPMorgan Chase and others in making the first of several syndicated loans to Disney.

Sometimes they are just "banks doing what banks do", says Mr Parks. Other lending, however, raises more eyebrows. A growing share of credit for acquisitions is directed towards 17 industries that governments tend to deem "sensitive", such as telecoms infrastructure, microprocessors and companies that collect personal data. In 2015, for example, four Chinese state-owned commercial banks provided a loan to Fosun, a Chinese multinational, to help it buy Ironshore, which sold liability insurance through its American subsidiary to officials at the CIA and FBI.

How do AidData's figures compare with other estimates of Chinese lending? ▸▸

Fund the rich 1

China, overseas loans from state-owned entities, by country income group, % of total



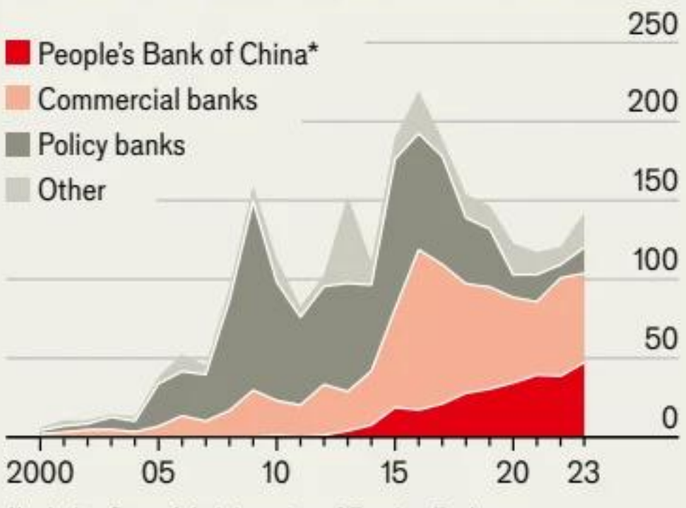
Source: "Chasing China: learning to play by Beijing's global lending rules", by B. Parks et al., AidData at William & Mary, Nov 2025

- According to China's State Administration of Foreign Exchange, the stock of loans at the end of 2023 was $805bn, plus another $644bn in trade finance. But these official figures are not directly comparable with the AidData numbers. They exclude credit extended by the overseas subsidiaries of Chinese banks and leave out loans that finance foreign direct investment, which is recorded separately. The official figures also represent the stock of loans that remained outstanding at the end of 2023, whereas AidData have added up the flow of credit over the preceding 24 years.

Mr Parks and his team may also have identified loans that even China's authorities struggle to track. Their database spans over 1,100 lenders and donors. Although they are all owned by the Chinese state, its ministries do not have "full visibility on what all these different banks are doing", he explains. He and his team have, on more than one occasion, discovered that Chinese officials sometimes use the AidData figures in their own work. "Having a one-stop shop where they can get all this information is too convenient to pass up," Mr Parks reckons. Not even the Chinese government always knows exactly how generous it has been. ■

Muscling in 2

China, overseas loans and grants, by state-owned official creditor, $bn, 2023 prices



*Includes State Administration of Foreign Exchange

Source: "Chasing China: learning to play by Beijing's global lending rules", by B. Parks et al., AidData at William & Mary, Nov 2025

Testy over Taiwan

Not for turning

China and Japan are locked in a vicious game of chicken

TAKAICHI SANAE was bound to rile China sooner rather than later. Japan's new prime minister is an outspoken nationalist with a reputation as a China hawk. As it turned out, it took less than three weeks. On November 7th, in Japan's Diet, she was asked what might prompt Japan to exercise "collective self-defence". The term refers to Japan's proclaimed right to use military force to defend an ally, such as America, when deemed necessary for Japan's own survival. Her answer: if force is used against Taiwan. China is furious.

Gone is the polite tone, with warnings carefully veiled, that characterised China's official readouts of Ms Takaichi's meeting with China's leader, Xi Jinping, as recently as October. It took place at a gathering of regional leaders in South Korea, a few days after she took office. Mr Xi reportedly told her that China was willing to "work with Japan to...advance the strategic, mutually beneficial relationship" (with the usual finger-wagging reference to Japan's wartime "history of aggression"). Now it is pure vitriol. "If you stick that filthy neck where it doesn't belong, it's going to get sliced off. Are you ready for that?" wrote China's consul-general in Osaka, Xue Jian, on X, a social-media platform.

China is probably not surprised by Ms Takaichi's words. In 2021 Aso Taro, then the deputy prime minister, said: "If a major problem took place in Taiwan, it would not be too much to say that it could relate to a survival-threatening situation [for Japan]." A few days later a white paper issued by Japan's defence ministry said that "stabilising the situation surrounding Taiwan" was "important for Japan's security". China was angry then, too.

What makes it even more enraged this time is that the idea was conveyed by the prime minister herself and Japan is engaged in a military build-up, in part to deter China (see Asia section). In Beijing, officials have warned that Japan would face "crushing defeat" were it to intervene in a conflict over Taiwan. The Communist Party's main mouthpiece, the *People's Daily*, said Ms Takaichi's remarks posed a "grave challenge" to the post-1945 order. (Taiwan was under Japanese rule from 1895 to the end of the second world war, when China resumed control of it; at the end of China's civil war in 1949 the defeated Nationalist government took refuge there.)

China has also lashed out by advising its citizens to avoid travel to Japan, citing safety concerns. This could hurt Japan's tourist industry: this year about a fifth of foreign tourists in Japan have been Chinese. China has also advised students to reconsider studying in Japan. A report by Kiuchi Takahide of the Nomura Research Institute, a Japanese think-tank, said such warnings could cost Japan ¥2.2trn ($14.2bn) in lost business, based on the impact of previous spats.

Once again, China appears to be stopping imports of Japanese seafood (it is only a few months since a similar ban, prompted by alleged safety concerns over waste-water from the wrecked Fukushima nuclear plant, was lifted). In Chinese cinemas, new releases of Japanese films are also being suspended. A social-media account run by China's state broadcaster noted that many Japanese products are "highly reliant" on Chinese imports. That raises the spectre of 2010, when China suspended sales of rare earths to Japan for a few weeks following Japan's arrest of a Chinese fishing-boat captain. In its recent trade war with America, China has re-used this weapon to powerful effect.

Meanwhile, manoeuvres in recent days by China's coast guard and navy in the Yellow Sea and near the uninhabited Senkaku or Diaoyu islands (claimed by both countries) in the East China Sea have drawn attention, though they are hard to distinguish from China's usual exercises and posturing. On X George Glass, America's ambassador in Japan, wrote: "In case anyone was in doubt, the United States is fully committed to the defence of Japan, which includes the Senkaku Islands."

Despite fulminations against Ms Takaichi on Chinese social media (often calling her a witch and punning on her surname, which sounds like "troublemaker" in Chinese), it is unlikely that China will encourage large-scale public protests. For all his use of nationalism to rally support for the party, Mr Xi is nervous about unleashing it on the streets: there have been no large-scale, nationwide, anti-foreign demonstrations in China since he took power in 2012.

But the spat could be lengthy. Ms Takaichi has said that she will avoid talking about specific scenarios relating to Taiwan in future, but has refused to retract her words, as China has demanded. She has no desire to appear weak so early in her tenure. Pressure on both sides is high. China abhors rhetorical adventurism on Taiwan, particularly under the island's current, defiant leader, Lai Ching-te. And Mr Xi's 2027 deadline for his forces to be capable of taking Taiwan is fast approaching—Japanese involvement in a conflict could make their task far harder. As a tough nationalist leader faces another one in China, sparks are bound to fly. Relations may well get worse before they get better. ■

CHAGUAN
Studied indifference

Europe sees China as a rival. China sees Europe as a has-been

EUROPEAN LEADERS reserve some of their fiercest criticism for themselves. They are admirably blunt in diagnosing their political and economic problems, if sadly not as adept at fixing them. Yet if they are feeling especially masochistic, they should consider travelling to China. There they will find much of their own self-criticism amplified—but in harsher tones.

Europeans endlessly debate how to avoid becoming trapped between America and China. For many in China that seems needless. "Europe is incapable of truly breaking free from America to become independent," opined a scholar from Fudan University in a recent article. As for challenges to European unity, Eurocrats love to navel-gaze. In China critics go a step further. "Whether the European Union can even survive until 2035 is a question," Zhang Weiwei, a nationalist academic, said on television in September.

And these are just the public comments. In private, as Chaguan recently heard from a range of Chinese scholars, the opinions are often more scathing. Europe is a bit like an ageing concubine who cannot accept that she has been ditched by her American emperor, says one consultant. "Europe hates innovation," says another. This disdain can sometimes seep into official affairs. A European business representative reports that on a recent visit to the Chinese foreign ministry he was greeted with a wolf-warrior-like berating—mainly, he surmised, for the sport of it.

The analysis that Europe is weak and divided is not entirely wrong. But the Chinese view tends towards a caricature of Europe's challenges, and this leads to two blind spots in China's approach to Europe. The first is to assume that Europe largely follows America's lead. Over the past few years many, though not all, Chinese analysts have applied this lens to the war in Ukraine. At its core they see the conflict as pitting America against Russia. From this perspective, Europe craves peace and stability, but it is brutish America that wants to prolong the war at little cost to itself in order to weaken Russia. Few reflect on why most European leaders see the war in Ukraine as a direct threat.

Another example came in September when the Dutch government decided to seize control at Nexperia, a Chinese-owned, Netherlands-headquartered chipmaker—a move partially reversed in recent days after a stand-off. The Dutch could scream until blue in the face that they acted of their own volition to counter risks to their economic security, but Chinese observers would not believe it. Surely, a small country behaving so boldly must be doing America's bidding.

The other blind spot is to believe that China somehow offers Europe a way out of its problems. Chinese scholars reason that Europe, like any rational middle power, wants to find a balance between China and America. In recent weeks China's commerce ministry has talked about restarting trade negotiations. It apparently has not given up on an investment pact that stalled in 2021 amid a row over China's actions in Xinjiang, a region situated in the country's north-west.

Yet such pining for deals betrays insufficient recognition of the extent to which China's economic model has become a major concern for Europe in its own right. In the past few years alone, Germany's trade relations with China have shifted from being basically in balance to running a gargantuan deficit on track to exceed $100bn this year. European companies that long profited from the Chinese market now see it as their fiercest competitor. And although it was a response to Donald Trump's trade war, China's export-control regime for rare earths was as disruptive to European companies as to American ones. It was a lesson for Europe in the dangers of dependence on China.

Things are getting tetchier on the diplomatic front. In June the EU scuttled an economic dialogue with China because of a lack of progress on trade disputes. In October Germany's foreign minister, Johann Wadephul, postponed a visit to Beijing when he was not offered the usual array of high-level meetings. The Chinese, for their part, were upset that Mr Wadephul had used a speech in Japan to criticise China's "increasingly aggressive" behaviour in Asian waters. And European officials in Beijing report that Chinese ministries have taken the unusual step of refusing démarches, or requests for formal diplomatic meetings. One European representative says that China is simply bored with Europe's hectoring and feels able to ignore it.

One-sided rivalry

Indeed, China sees little reason to worry about a souring of its relations with Europe. Policy officials in Beijing seem confident that they have already outmanoeuvred Mr Trump in the trade war, and think that dispatching Europe will be even easier. What is more, China has much experience in cultivating warmer ties with individual European countries to neuter their cohesion as a bloc. These days, it has identified Hungary and, increasingly, Spain as two countries that are especially receptive to Chinese investment. Moreover, even when Europe acts, as with tariffs on Chinese electric vehicles, it remains constrained by its deep commitment to rules. Bureaucrats in Brussels do not strike fear into the hearts of the hard men in Beijing.

Is China at risk of miscalculating? So long as the Ukraine war continues with China backing Russia's pariah, Vladimir Putin, Europe's relationship with China is unlikely to improve. Meanwhile, on trade, Europe's views are fast evolving. A continued surge in Chinese exports could provoke Europe to take more measures—some possibly aggressive—to head off the threat. If that happens, it would be a demonstration of Europe's stiffening backbone. But Beijing, convinced that America calls the shots, might still miss what matters: Europe's new anger is its own. ■

Middle East & Africa

Saudi Arabia and America

MBS meets MAGA

WASHINGTON, DC

The Saudi crown prince takes a victory lap in Washington

FOR SAUDI ARABIA, the visit could hardly have gone better. On November 18th Donald Trump welcomed Muhammad bin Salman, the Saudi crown prince, with all the pomp America could muster, including a military fly-past and a black-tie dinner at the White House. The two men signed deals for investment, arms sales and nuclear co-operation. Mr Trump declared Saudi Arabia a "major non-NATO ally". After a decade of tension, American-Saudi relations appear to be back on a solid footing.

Look closer, though, and the deals were typical Trump: long on promises, short on specifics. As Prince Muhammad heads home, two questions linger. First is whether he can hash out the details with a flighty Trump administration. Second is whether, as Mr Trump's second term wears on, he will put pressure on the prince to sign the one deal he is not yet ready to make—to normalise ties with Israel.

Start with the nuclear pact. The Saudis want nuclear reactors to meet growing energy demand. Mr Trump wants American firms to build them. They have spent months negotiating the details, and America's energy secretary says the talks have now finished. But the two countries have yet to sign a "123 agreement", named after the relevant bit of America's export-control laws. What they announced this week was more of a deal to reach an agreement.

The final pact will require approval from Congress. Many lawmakers want Saudi Arabia to follow the example of the United Arab Emirates, which swore off uranium enrichment to secure its own deal in 2009. But the Saudis are keen to possess such a capability, despite American fears about nuclear proliferation. Some officials have mooted a scheme to build a Saudi-owned enrichment facility in America as a way to split the difference.

If the nuclear talks may still need weeks or months to finish, the sale of F-35 fighter jets will need years. The kingdom wants to buy dozens of the planes, the most advanced in America's arsenal. This too requires an okay from Congress, and lawmakers from both parties worry about what it will mean for Israel's military edge in the region. Even if they do approve the sale, the aircraft are unlikely to be delivered before the end of the decade.

Then there are the investment deals. Mr Trump said Saudi Arabia promised to invest nearly $1trn in America, up from the $600bn it pledged when he visited Riyadh, the Saudi capital, in May. That is a sum larger than the kingdom's entire sovereign-wealth fund. Saudi Arabia is struggling with low oil prices, which have forced it to take on debt and cut back some of its ambitious plans to diversify its economy. It is keen to invest in America—but does not have a spare trillion dollars lying around.

Still, these are questions for another day. If the point of the visit was to show that Saudi Arabia had rehabilitated itself in ▸▸

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41 Israel's psychological reckoning

42 Africa's other debt crisis

43 Soldiers v jihadists in Mali

Washington, it was a success. By the time Prince Muhammad made his first trip to the White House in March 2018, his country had become a partisan issue. Democrats were angry at his courtship of Mr Trump and his ruinous war in Yemen.

Six months later Saudi agents murdered Jamal Khashoggi, a Saudi journalist who was a contributor to the *Washington Post*, inside the kingdom's consulate in Istanbul. The killing poisoned American-Saudi relations for years. As a candidate in 2019, Joe Biden promised to make the prince a "pariah". High oil prices forced him to reconsider: in the summer of 2022 he flew to Saudi Arabia, hat in hand, to ask the kingdom to pump more oil. But the relationship remained frosty.

No longer. In recent years the Saudis have adopted a more pragmatic foreign policy. Gone are the days when they blockaded a neighbouring country and kidnapped a Lebanese prime minister. They have also made a pitch to the Americans around great-power competition. The kingdom wants to supply American industry with critical minerals, for example, which would help break its dependence on China. In a recent meeting a top American official pulled out a periodic table of the elements and asked the Saudis to point out which minerals they could offer. "Opinions of Saudi have changed substantially in this town," says one congressional staffer.

The F-35 deal is another sign of how things have changed. Israeli officials are not panicked about losing air superiority: by the time the Saudis receive their first F-35, Israel will have been flying the complex jets for 15 years.

But they are unhappy with how the deal was negotiated. For years sales of advanced American weapons to Arab countries took place only after detailed talks at the Pentagon between Israeli and American officers. Mr Trump bypassed that process. With Israel's stock in Washington at a nadir after the Gaza war, this may be a worrying precedent.

That helps explain why Prince Muhammad is no longer eager to join the Abraham accords, the 2020 agreements that saw four Arab states normalise ties with Israel. Mr Biden was close to brokering such a deal in 2023. In return for Saudi recognition of Israel, America would have offered the kingdom a defence treaty and other incentives. Prince Muhammad saw this as a way to rebuild his standing in Washington.

But the outbreak of the Gaza war in 2023 put the agreement on ice. For more than a year, the Saudis have insisted they will not sign a deal unless it includes a serious path to creating a Palestinian state (which Binyamin Netanyahu, the Israeli prime minister, will not even consider). Mr Trump is nonetheless determined to expand the accords during his second term. His administration hopes a deal with the kingdom would have a ripple effect. Saudi Arabia is, by far, the largest Arab economy and the custodian of Islam's holiest sites. If it agreed to recognise Israel, other Arab and Muslim countries might follow suit.

Prince Muhammad let Mr Trump down gently during their Oval Office meeting. "We want to be part of the Abraham accords," he said. "But we want also to be sure that we secure [a] clear path [to] a two-state solution." The Saudis will keep the prospect of normalisation on the table: it is a useful carrot to dangle in front of American lawmakers. They will also deepen discreet economic ties with Israel. Numerous Israeli businessmen have been observed in Riyadh this year (they travelled on second passports). But the Saudis are serious when they say that a deal requires progress towards a Palestinian state.

Some Saudis worry that Mr Trump will raise the pressure on Prince Muhammad later in his term; perhaps delivery of the F-35s, for example, will eventually be linked to normalisation. For now, though, Mr Trump seems inclined to be patient—and the Saudis feel no need to hurry, because their relationship with America no longer depends on recognition of Israel. ■

Israeli weapons sales

Arms-in-arms

JERUSALEM

Israel may not be popular, but its weapons are

THE ANNOUNCEMENT on November 14th that Morocco will establish a production facility for small tactical attack drones was not surprising. The north African country has been investing in modernising its armed forces; such munitions are expected to dominate the battlefields of the future. What was surprising was that their industrial partner was a subsidiary of Israel Aerospace Industries.

This is the first time an Israeli-designed weapon system will be made in an Arab country. But since the two countries established diplomatic ties in 2020 as part of the Abraham accords, Morocco has bought Israeli self-propelled cannons, air-defence missiles and a spy satellite as well as drones.

Morocco is not alone. The United Arab Emirates (UAE) has bought two Israeli missile systems, one of which has already been deployed. Bahrain uses Israeli radar for its coastal defences. Indonesia, a Muslim-majority country, is another customer.

Israel does not publish the full details of its arms sales, but since 2022 the annual reports of its defence ministry have had a section devoted to "Abraham accords countries". In 2024 these sales totalled $1.7bn, or 12% of all of Israel's defence exports that year.

The Abraham accords made sales of military hardware possible. But another offensive Israeli tool, Pegasus, a powerful piece of spyware, was being used by the UAE and Bahrain to hack into the smartphones of dissidents well before the accords were signed. It has also been used by Saudi Arabia, which does not yet have diplomatic relations with Israel.

"Arms deals are a potent form of diplomacy," says an Israeli defence official. "Unlike most other commercial deals, they take a long time to materialise and then lock governments into long-term relations with the Israeli firms that continue servicing their wares."

"One reason the Abraham accords have withstood two years of war in Gaza," says an Israeli diplomat recently posted to the Gulf, "is that they represent an investment by these countries in their own security." Israel's missile-defence systems have been developed, and used, to counter Iranian missiles, which threaten Gulf states, too.

"No one has any illusions that Israel is popular right now in these countries," says the diplomat. "But their governments have made long-term investments in their defence ties with Israel, and they're not about to change course."

How to make friends and influence people

Israel

After the war

JERUSALEM

For Israel a psychological reckoning is the price of bloody victory

IN A SMALL country such as Israel the award of a Nobel prize to one of its citizens is usually cause for national celebration. The announcement last month of Joel Mokyr's share of the economics prize, however, received scant recognition. In part, that was because it coincided with the release of the last living hostages from Gaza. All attention was on that and the ceasefire. Mr Mokyr has also been a vocal critic of Israel's current government, so official acclaim was never likely.

But some in Israel suggest another reason for the muted reaction is that Mr Mokyr is based in America and has been for over 50 years. "Everyone here loves Yoel," says an economist at the Hebrew University in Jerusalem, where Mr Mokyr studied. "He couldn't have had the same career if he stayed in Israel. He remains a proud Israeli and is very connected to Israeli academia. But the fears of a brain drain are very present right now."

The horrors of Israel's war in Gaza and the suffering of the Palestinians over the past two years have changed outsiders' views of Israel. But the attacks by Hamas in October 2023 and all that has followed have also changed how Israelis feel about their country. Some are asking whether their future still lies in Israel. It has shown a dazzling military supremacy over its enemies in the past two years. But the future augurs eternal vigilance and war rather than enduring stability, with the ceasefire in Gaza barely holding, no more comprehensive deal with the Palestinians in sight, and politics more polarised and extreme than ever before.

That will have far-reaching implications for Israel's future. Such fears are not new. The opportunities and resources of American universities have always been tempting for the country's brightest. In the past 25 years four winners of the Nobel prize in economics had either studied or taught at the Hebrew University. Only one stayed in Israel after his career took off.

But although economic calculations have always been a factor, in the past three years the policies of Binyamin Netanyahu's coalition, dominated by hard-right and ultra-religious parties, and the war in Gaza have brought a political aspect to the conversation about emigration.

Why the exodus?

"Israel's economic and technological edge is based on a relatively small number of Israelis who are key to research and teaching in the fields of science and medicine—all of whom could easily find jobs abroad," says Dan Ben-David, an economist at Tel-Aviv University. He reckons they number around 300,000; just 3% of Israel's population. But in 2024 the tech sector provided 59% of Israel's exports of goods and services, and its workers are highly mobile.

Recent figures from the Central Bureau of Statistics suggest Israel should worry. For over a decade the emigration rate had been fairly low and stable—at about 40,000 a year. But in 2023, the first full year of the current Netanyahu government, the numbers leaving shot up by nearly 50% to 59,365. In 2024, the first full year of the war in Gaza, departures rose to 82,774.

It is hard to tell from this whether Israel is facing a brain drain as a result of the past three years. It is common for academics to leave to work abroad for a time and then return, points out Mr Ben-David. But, he continues, "Anecdotally, we're all hearing about colleagues who are leaving."

Dig into the numbers and the share of those emigrating who have only recently become Israelis is significant. Some 38% of those leaving in 2024 had themselves emigrated to Israel less than five years earlier. That suggests that many arrived very recently, as part of a surge in Jewish emigration from Russia and Ukraine since the war in Ukraine began in February 2022, says Sergio Della Pergola, a veteran Israeli demographer. "Many of them saw in Israel a short-term haven from the war there," he explains. "When the war began here, they left. I don't think that in general the number of those who left is surprising when Israel has just gone through a long war."

But that does not mean, he adds, that Israel should not fear a brain drain. "There are worrying indications that those leaving tend to be younger and well educated, especially young doctors." Secular Israelis with academic degrees are more likely to oppose Mr Netanyahu's government. The tech sector was at the forefront of protests against its policies before the war.

Palestinian suffering features low in their concerns. Instead there is a burning anger over Israel's polarisation that has only increased over the past two years. Many secular young professionals have spent months fighting as reservists with the Israel Defence Forces (IDF). Meanwhile the ultra-Orthodox community, which constitutes about 14% of the population and whose political parties are key to Mr Netanyahu's coalition, refuses to enlist.

Over 300,000 reservists were called up during the Gaza war. Despite ceasefires in Gaza and Lebanon, the IDF plans to keep a high level of alert for the foreseeable future, so many reservists will have to spend another two months on duty in 2026, says the chief reserve officer, Brigadier-General Benny Ben Ari. "It means we'll have to pay a lot more attention to reservists' fatigue, find ways to help their families and businesses and students who have lost entire years of study due to the war."

Israel's generals insist that boosting the numbers of its standing army is crucial to prevent another surprise attack like that of October 2023 on any of Israel's tense bor-

ders. But there is a price for Israeli society in that strategy, cautions Rachel Azaria, the founder of an organisation that supports reservists' families. "The reservists are also the ones who in civilian life carry the burden of Israel's economy, its tech sector and academia."

At the same time Israel is seeing a national psychological crisis, argue Israeli experts. The extent to which the attacks of October 2023 and the war that has followed are to blame is hard to pin down. According to the IDF, 21 soldiers killed themselves in 2024, the highest number reported since 2011. Colonel Dr Yaakov Rothschild, the head of the IDF's mental-health division, denies that this represents a rise in suicides since the army's size has grown because of the heavy call-up of reservists.

"The focus on combat trauma and soldier suicides misses the bigger problem; the IDF has the resources to deal with that," says Doron Sabti, a social worker who runs a volunteer-based mental-health programme. He argues that there needs to be a much wider response within Israeli society. The government has so far allocated 1.9bn shekels ($550m) for mental-health funding since the war began but the professionals warn this will not be enough. A military psychologist cautions: "The tail-end of this war is a society in trauma." ■

African economies

The other debt crisis

JOHANNESBURG

It is not just loans from China and Western financiers. Domestic borrowing is surging, too

TWO DECADES ago African debt was high on the international agenda. In 2005 the G8, as the group of rich countries was then called, approved widespread debt relief for poor countries. As the G20 (a larger group that includes China and rising middle powers) prepares to meet in Johannesburg on November 22nd and 23rd, its first ever meeting in Africa, the South African organisers want global attention on indebtedness again. African debt is "stifling public spending and economic growth", Cyril Ramaphosa, South Africa's president, said ahead of the bash.

Mr Ramaphosa has a case. As a share of sub-Saharan Africa's GDP, total government debt is 59%, roughly double what it was in 2012. The IMF classifies 20 countries in the region as in, or at high risk of, "debt distress". Some 32 African countries spend more on servicing their debts than they do on health care, with 25 spending more than they do on education. African countries are "defaulting on development", says Trevor Manuel, a former South African finance minister, who chairs a group advising the G20 on debt.

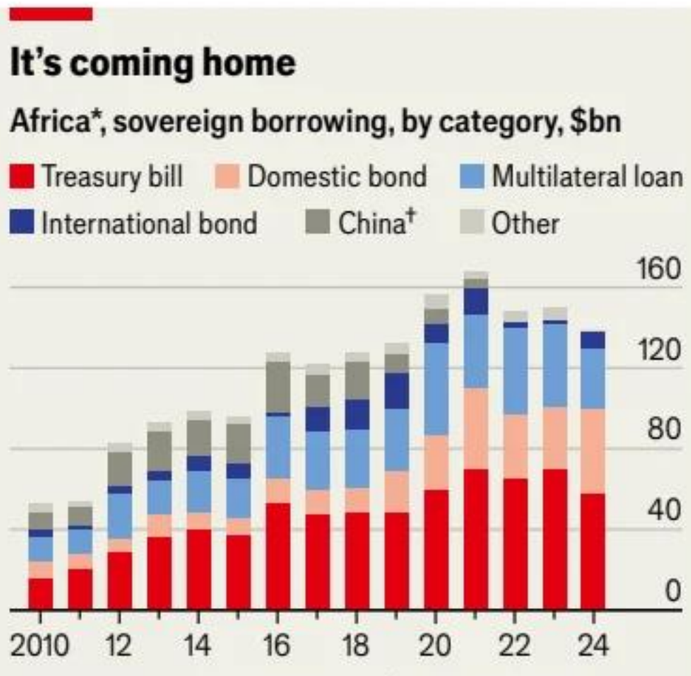
But today is not the 2000s. Western governments are not in a forgiving mood. Donald Trump is eschewing the summit and has told American officials to stay away. The G20's Common Framework, an initiative launched during the covid pandemic to organise restructuring, has led to relief equivalent to just 7% of the net present value of the debt stock in the four participating African countries, estimates the ONE Campaign, an advocacy group.

Even if Western policymakers wanted to grant debt relief, they have less scope to do so. A generation ago most African debt was owed to Western governments or multinational bodies, such as the World Bank and the IMF. While roughly a third of external debt (34%) is still owed to multilateral lenders, 43% is accounted for by private creditors, including the Western financial firms that hold so-called Eurobonds (as debt in foreign currency is known). These have a commercial interest in limiting their losses. China, the largest bilateral creditor, typically grants delays in repayment, rather than permanent debt relief.

Then there is the borrowing that few people will mention at the G20—domestic debt. African countries' domestic borrowing has surged, according to the Kiel Institute for the World Economy, a German research group, which last month launched the first comprehensive database of African debt. Its accompanying paper notes that outstanding domestic issuance has risen from $150bn in 2010 to nearly $500bn in 2024, more than from any external source. The researchers call this "a major transformation in the composition of sovereign liabilities" (see chart). Around half of total government debt in sub-Saharan Africa is owed to domestic banks, according to the IMF.

It's coming home

Africa*, sovereign borrowing, by category, $bn



*Excluding Egypt and South Africa †No data after 2021
Source: Kiel Institute, African Debt Database

In theory, borrowing in local currency avoids the "original sin" of sovereign debt: the risk that your currency depreciates relative to the dollar, making repayment harder. "A well-functioning domestic market can be displayed to build market confidence for a foreign investor," says Ka Lok Wong, one of the authors of the Kiel Institute paper. That research cites Mauritius, Nigeria, Rwanda, Tanzania and Uganda as examples where there have been clear signs of market development, including longer-duration maturities.

Yet the interest rates on domestic loans are usually three to six percentage points higher than on external concessional loans, points out the African Centre for Economic Transformation (ACET), a think-tank in Ghana. Some African governments that have been shut out of external markets are borrowing domestically at high rates and short maturities. The Kiel Institute paper cites Ghana and Mozambique, both of which have defaulted over the past decade. Kenya, which has one of the highest ratios of debt-service costs to revenues in the world, will tap domestic markets for two-thirds of its financing needs in 2025.

The IMF worries about what will happen to local banks if governments struggle to pay back their domestic loans. Banks in sub-Saharan Africa have more than 20% of their assets in government debt, a higher share than any other region, and roughly double the share in 2010. Banks are also at risk of financial repression, the fund says, if inflation erodes the value of their government holdings. The researchers in Kiel note that while on average African domestic borrowing attracts a positive real interest rate, some loans earn minus 20% a year.

A related concern is if lots of government debt crowds out lending to the private sector. Vera Songwe of the Liquidity and Sustainability Facility, a body founded by the UN to support African borrowers, argues that domestic debt is reducing the private lending needed to generate the economic growth that could lower current debt burdens.

Deeper capital markets would be a boon for Africa. Gregory Smith, author of "Where Credit is Due", a book on African debt, points out that domestic borrowing was essential for the rise of Asian countries in the 20th century. But while some countries are showing promise, others are stuck in a pattern of short-term borrowing from their own financial institutions because there is little alternative. ■

Terrorism in the Sahel

Road rage

BAMAKO

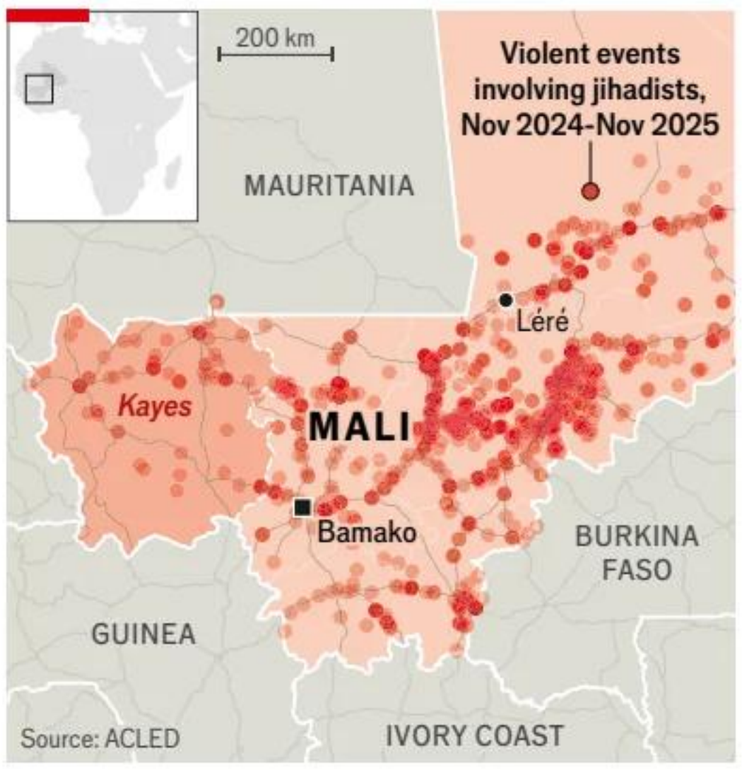
A fuel blockade shows the frightening power of Mali's jihadists

ADAMA MAGANE has been a lorry driver in Mali for 22 years. For most of that time his country has been hammered by a jihadist uprising and a separatist revolt. It has experienced three coups, most recently in 2021, and cut ties with France, the former colonial power. Yet the past two months, Mr Magane says, have been unlike anything before it. A crippling blockade of fuel imports by jihadists linked to al-Qaeda has turned the motorways that connect Mali to its coastal neighbours into death traps. Several of his colleagues have been killed. Tomorrow, he frets, "it could be me."

The ruling junta insists such fears are overblown. Earlier this month schools in Bamako, Mali's capital, began reopening after a two-week closure—the latest sign of normality, which the government says proves the jihadists are "no match" for the Malian army. It has a point. Contrary to some recent news headlines, Jama'at Nasr al-Islam wal-Muslimin (JNIM), the Sahel's pre-eminent jihadist group, is not about to follow in the footsteps of jihadists in Afghanistan and Syria and seize power in the capital. Nevertheless, the brutal effectiveness of its blockade of Bamako since it began in September sends a powerful warning to Mali's rulers, as well as their fellow putschists in neighbouring Burkina Faso and Niger. Unless they can find a better solution to the Sahel's security crisis than Russian-backed militarism and repression, their days are probably numbered.

The success of the siege appears to have taken the jihadists themselves by surprise. What began as ad hoc retaliation against fuel restrictions imposed by the junta on areas under JNIM's control has morphed into a broader economic war. Héni Nsaibia of the Armed Conflict Location & Event Data group (ACLED), a monitor, says JNIM now has a presence on all the main transit routes in and out of the capital. In recent weeks, at least 100 fuel tankers have been attacked. Besides Bamako, smaller towns, such as Léré near the border with Mauritania, are also under blockade.

As a result, "Bamako is breathing harder every day," says Mamadou Doumbia, a resident. A litre of petrol now fetches up to 5,000 CFA francs ($8.80) on the black market, more than six times the official price. Modibo Mao Makalou, a prominent Malian economist, estimates that despite recent improvements the city still has only about 10% of pre-blockade volumes of the stuff. Transport costs have doubled and the number of hours most households have electricity each day has gone from 12 to six, he says. Businesses are closing or laying off staff. Some Western governments, anxious not to repeat the disastrous evacuation of Kabul, Afghanistan's capital, in 2021, have ordered diplomats to leave.



Few analysts, however, think the Kabul scenario is on the cards. JNIM, whose fighting force is believed to be only around 6,000 strong, does not have the "wherewithal, resources or skills to govern a city like Bamako", says Fola Aina, a security expert. For now, the group appears more focused on growing and diversifying its income, which partly explains its recent targeting of the western Kayes region, Mali's gold-mining heartland (see map). It has also stepped up kidnappings of foreigners for ransom. And though some reckon it seeks to emulate the former jihadists of Syria, who moderated in order to become a more palatable governing force, JNIM has yet to renounce its ties to al-Qaeda or take other steps towards building the broad-based coalition it needs to run the country.

Hence the aim of the blockade is probably limited to eroding public faith in the junta until it is forced to give way to a more jihadist-friendly government. That could be a while off. Though public support for the regime is waning, there have been no street protests. Nor is there much reason to expect another coup. The army is backed by Africa Corps, a contingent of Russian mercenaries previously known as the Wagner Group. In August Assimi Goïta, the junta leader, purged soldiers suspected of disloyalty. Those who remain are "really in this together", reckons Ulf Laessing, the Mali-based head of the Sahel programme at the Konrad Adenauer Foundation.

Recently, the junta seems to have had more success in protecting fuel convoys, thanks in part to escorts by the Africa Corps. It has ramped up repression, accusing fuel traders of speculation and banning photography at petrol stations. It is also reported to have cut a deal with the jihadists, trading a partial easing of the blockade for the release of around 30 prisoners.

At some point, the junta will probably have to enter formal negotiations with JNIM, including on topics such as the establishment of Islamic rule. Nearly a decade after its founding, the group now has drones and can carry out attacks in at least six countries. The Sahel's juntas are facing a long war of attrition. ■

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KYIV

A corruption scandal and a dubious ceasefire plan plunge Ukraine into its biggest crisis since the invasion

VOLODYMYR ZELENSKY is facing his most challenging test since Russia's full-scale invasion in 2022. A huge corruption scandal in which senior officials allegedly stole millions from Energoatom, the state nuclear company, has cost him two ministers. Officials and MPs are pressing him to purge tainted allies in order to save himself and the state. Meanwhile, on November 19th, American media reported on a secret 28-point ceasefire proposal negotiated by American and Russian officials demanding that Ukraine settle with its invader on crippling terms. The proposal may not have full American backing. But it adds to the pressure on Ukraine's president at a critical time.

Sources in government say Mr Zelensky has been "floored" by the scale of corruption charges against members of his inner circle. On November 19th parliament voted to dismiss Svitlana Hrinchuk, the energy minister, and Herman Halushchenko, the justice minister. On November 20th, as *The Economist* went to press, Mr Zelensky was due to face members of his parliamentary party, many of whom want more heads to roll. "They want revenge for four years of being humiliated," said an opposition MP.

The corruption investigations were a Herculean feat by detectives. Secretly recording conversations in flats and offices around Kyiv, they uncovered a scheme to embezzle at least $100m from Energoatom using kickbacks of 10-15% on contracts. Some of the money appears to have been sent to Moscow. Some was earmarked for villas near Kyiv allegedly intended for use by Oleksiy Chernyshov, a former deputy prime minister, and other officials. Detectives from the National Anti-Corruption Bureau (NABU) found a golden toilet bowl in an apartment owned by Timur Mindich, a former business partner of the president. Mr Mindich, accused of co-organising the scheme, fled the country mere hours before detectives arrived at his home. Six suspects have been arrested. Mr Chernyshov, Mr Halushchenko and Ms Hrinchuk deny any involvement in corruption.

As in a crime thriller, the accused used aliases. Detectives say "Carlson" referred to Mr Mindich, "Che Guevara" to Mr Chernyshov and "Professor" to Mr Halushchenko. In the tapes, one of the accused complains of back pain from lugging bags of cash. Another suggests it would be a "waste of money" to protect electrical substations near nuclear power plants. The same substations were targeted by Russian drones and missiles on November 8th, just before the scandal broke.

When the suspects realised they were being recorded, they allegedly began menacing the NABU detectives—following them, obtaining their home addresses and even tracking them using classified government CCTV networks. Around this time

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the president's office began to put pressure on anti-corruption bodies. On July 21st several detectives involved in the probe were detained by security services. The next day the president's party pushed through a hasty bill stripping the anti-corruption agencies of their operational independence—a move reversed after huge public protests. Oleksandr Klymenko, the head of SAPO, Ukraine's anti-corruption prosecutor's office, says it was only because the presidential office failed in its efforts that the investigation went ahead.

Sources close to the investigation say they have not yet established how high knowledge of the scheme went. Its roots likely predate Mr Zelensky's presidency. Many alleged members are linked to Andriy Derkach, a former MP who once headed Energoatom and fled to Russia in 2022. Well-placed sources argue the president could not have known the details. Yet the proximity to the scheme of his close allies is enough to jeopardise his future.

At home, the scandal risks encouraging cynicism and leading more soldiers to desert. Abroad, it makes it harder for Ukraine to ask for the aid it needs, estimated at $100bn per year. Some will use revelations of corruption not as proof that the country has independent corruption-fighting bodies, but as an argument to cut support.

The risks to Ukraine's Western backing were underlined by reports of the Russian-American peace proposal. Drafted without Ukraine's knowledge by Steve Witkoff, Donald Trump's special representative, and Kirill Dmitriev, Vladimir Putin's envoy, it seems little short of a demand for capitulation. Sources familiar with the 28-point document say it envisages slashing Ukraine's troop strength by 60%. Ukraine would be asked to cede more territory and barred from possessing several classes of weapons, including ones that could hit Moscow. No foreign troops would be allowed on Ukrainian soil. Ukraine would be required to designate Russian as a second state language and to restore the local Russian Orthodox Church, disbanded over charges of serving Kremlin propaganda.

Ukrainians see such demands as non-starters. It is unclear how widely the plan was circulated in the Trump administration, or whether it was a personal initiative by Mr Witkoff. The State Department has declined to comment on it. Ukraine first learned the details during a meeting in Miami this week between Mr Witkoff and Ukraine's national-security chief, Rustem Umerov. Mr Zelensky is said to have been frustrated with the results of those talks. Mr Witkoff had been meant to fly to Turkey on November 19th to meet Andriy Yermak, Mr Zelensky's intimidating chief of staff, who has faced growing criticism in the wake of the scandal. That meeting was cancelled at the last minute.

Knives are out for Mr Yermak, who has alienated both friends and enemies by monopolising access to the president. He has not been directly accused of involvement in the scheme, and supporters say he has been unfairly demonised. People "want to throw everything on Andriy", says Iryna Mudra, deputy head of the presidential office. Yet some MPs insist Mr Zelensky cut him loose. A social-media post by Mykyta Poturaiev, a senior MP, suggested demands would also include forming a new government of national unity.

Mr Zelensky has no easy solutions. Anti-corruption investigators will no doubt uncover more damaging information. Some see the crisis as an opportunity for a reset, a chance for the president to free himself. "Zelensky faces his day of reckoning," says a senior official. "Either he amputates a leg, or he gets an infection going through the whole body and dies." ■

Ukraine

Lost in the rubble

KYIV

Russia's relentless bombing leaves no time to search for keepsakes

ONE NIGHT in August Yaroslav Yemelianenko, an emergency worker, picked up a torn photograph at the site of a missile strike in Kyiv. It showed two middle-aged women hugging their teenage sons. The next day he posted it on Facebook, and was immediately contacted by one of the women—siblings, it turned out. Her sister and nephew had been killed in the strike. That led Mr Yemelianenko to wonder what ultimately happens to bomb-site debris, after it is swept for human remains and explosives and carted away.

Following a lorry, he wound up at a vast heap of rubble in an industrial zone off the airport road. A group of men stood waiting with spades, ready to scavenge. At the disposal site, shattered brick mixes with the remains of shattered lives: a woman's anorak, a toddler's bootie, a marriage certificate. A spokesman for Kyiv's mayor blames the mess on a shortage of landfill sites and on disputes with the national government.

Mr Yemelianenko would like to see the rubble taken to secure locations where personal possessions can be cleaned, catalogued and held for survivors. This practice, known as "personal effects return", is becoming standard after disasters. Authorities may be tempted to "scoop and run", says Lucy Easthope, an expert adviser on recovery. Instead, they should "think what's possible": the most mundane objects can hold great meaning for families.

In New York City after 9/11, 1.5m tonnes of rubble were sorted and more than 50,000 possessions recovered, with 80% of them returned to families. Nothing on this scale will happen in cash-strapped Kyiv. Survivors' group chats are filled with pictures of dead loved ones and frustration at bureaucracy.

When Putin bombed brown bear

Lesya Mazur's 17-year-old daughter Nina was killed in a missile strike on August 28th. Sitting next to a bucket full of onions in the kitchen of the new flat the government has rented for her, Mrs Mazur shows photographs of Nina at her school graduation ceremony. Immaculate in ball gown and sash, she had been due to start university in Poland, and Mrs Mazur had been working at three cleaning jobs to pay the fees. The only possession of Nina's she now has is a ring, handed over at the morgue.

Would more be any comfort? She shakes her head. "I've got two lives now: before and after," she says. Her greatest wish is that "Putin is punished. I don't want money, I don't want anything else. I want them all punished for what they are doing to Ukraine."

Vineyards in France

Vanishing act

BAIXAS

As wine-drinking declines, farmers are ripping out vineyards

SET AGAINST the majestic backdrop of the snow-capped Pyrenees, the valleys and plains around the village of Baixas, near Perpignan, were once pleasingly covered in neat rows of vines. Today the landscape in this corner of southern France is an agricultural mishmash. Piles of uprooted vine stems, gnarled and blackened, lie abandoned here and there in empty fields. In some places, wild grasses and scrub cover land that once bore Grenache noir or Syrah grapes. In others, prickly-pear cacti or thorny argan saplings have replaced the vines. Grape-growing continues. But France's biggest wine-producing region is losing swathes of its vineyards.

The wine region of Languedoc-Roussillon, along the south-west Mediterranean coast, does not produce the world-famous fine wines of Bordeaux or Burgundy that grace the upscale tables of Paris or New York. But the region accounts for 28% of France's production by volume, with an output of nearly 10m hectolitres in 2024—almost three times that of the Bordeaux vineyards. This is not a land of grand châteaux, approached via cypress-lined gravel drives. Much of the wine around Perpignan is made from grapes grown on small plots by farmers belonging to local co-operatives. And they are struggling.

This year farmers have ripped out 14% of vines in the department of Pyrénées-Orientales, which surrounds Perpignan. It is a secular trend. Between 2000 and 2020 the department lost nearly half its vines. Across Languedoc-Roussillon, nearly 15,000 hectares of vines—the equivalent of four-fifths of the area of Washington, DC—are being torn out this year.

Farmers blame drought, lack of access to reservoir water and higher energy and other costs since Russia's invasion of Ukraine. Indeed a government scheme, designed to help troubled grape-growers, pays them to destroy vines: farmers can apply for a €4,000 ($4,625) grant per hectare of vines torn out. The trend and the scheme reach across France. The government last year received applications for the destruction of nearly 30,000 hectares countrywide. The International Organisation of Vine and Wine, an industry body, notes an "abandoning of vineyards" in Languedoc-Roussillon but also around Bordeaux and the Rhône valley. "The landscapes as we know them are being transformed," says a wine-industry boss.

In the short run, says André Serret, who runs the Dom Brial wine co-operative in Baixas, local vine-growers may be able to stay in business if they can secure water for irrigation. But environmental groups make this difficult, and repeated droughts are taking their toll. Even at this time of year the water table is low, and farmers face water restrictions. In the zone around Perpignan that includes Baixas the current official water status is "crisis".

Yet those who battle on are also facing a shift as relentless as climate change: the global decline of wine-drinking. This has not spared France. Gen Z, according to a French study, thinks wine is "complicated" and mainly for "old people". Apart from chilled rosé in summer, young people prefer spirits, beer or no booze at all. Nearly a quarter of French adults aged 25 or under do not touch alcohol. The share of French people of all ages who drink a glass of wine every day has collapsed from 51% in 1980 to 11% today. Even *le dry January* has reached France. Paradoxically, cheaper wine has suffered the most. "People prefer to buy one bottle of good wine rather than drink in volume," says a winemaker near Baixas.

The industry is trying to adapt. Winemakers are moving upmarket, or into newly modish "natural" wines, made organically with no additives. Some former *vignerons* are turning to olives, pomegranates, pistachios, peppercorns and other crops that resist drought. For those who visit, the changing landscape is a loss. Among those who plough the soil, there seems to be resignation rather than regret. "Bit by bit, the vines will be ripped out, one way or another," says Mr Serret. "In time there will be only a few vine-growers left." ■

The war on terroir

Russian media

Out of line

KYIV

Russia's Z-bloggers are clashing with their own regime

RUSSIA'S REPRESSIVE justice machine has taken a break from its usual diet of intellectuals, opposition politicians and LGBT activists. In recent weeks the regime's own war propagandists—often called "Z-bloggers", in reference to the Zs emblazoned on Russian tanks—have found themselves in its sights. In September the government branded Roman Alyokhin (who has 151,000 subscribers on Telegram, a social-media site) a "foreign agent" for criticising Russia's army. In October Tatyana Montyan (400,000 subscribers) became the first Z-blogger to be declared a terrorist. In November Oksana Kobeleva (10,000) was detained by police. All had criticised senior officials or other propagandists.

On November 13th Apti Alaudinov, a defence official, insisted there had been no misunderstanding. He announced a battle against what he described as "internal enemies". Those who did not seek common ground would be "destroyed legally".

Ivan Philippov, an analyst, says the turmoil represents a "struggle between species" in the Z-world, pitting grassroots bloggers against more powerful media players. For much of the war, military bloggers have attacked alleged corruption in the defence ministry. Vladimir Soloviev, a senior Kremlin propagandist, has also come under heavy criticism. But this ap- ▸▸

peared to be tolerated so long as the bloggers created a veneer of public support for the war and organised donation campaigns to acquire needed equipment. Now that deal seems to have collapsed.

The impact the Z-bloggers have made on the battlefield is disputed. State procurement has made all the difference in battlefield metal, such as missiles, glide bombs and extended-range drones. But much less flashy kit—local jamming stations, medical supplies—is procured by donation campaigns led by the Z-bloggers or by soldiers themselves. One theory, says Mr Philippov, is that the defence ministry is trying to divert the Z-channels' donations to loyalists under its control.

The standoff evokes the mutiny in 2023 led by Yevgeny Prigozhin, chief of the Wagner paramilitary group. But today's quarrel is much smaller, and there is no suggestion of any uprising. The bloggers are relatively minor players, important for maintaining the appearance of public support but not much more. And they generally do not cross lines such as directly criticising Vladimir Putin or disclosing the number of Russian casualties. Finally, the developments come at a time when Russia is experiencing a degree of success on the battlefield. Ukraine is struggling in Donetsk province and across its south-east, where its forces were last week forced to withdraw from three small villages.

The Z-bloggers also stop short of criticising the Kremlin's war aims. On the contrary, many are pushing Mr Putin to double down and initiate a second round of conscription, some writing that a "victory" will be impossible without it. A source in Ukrainian military intelligence suggests that Russia has the resources to pin Ukraine back throughout 2026, using only voluntary recruitment. This year's recruitment drive is on course to meet its target of 403,000 soldiers, only slightly down from 420,000 in 2024. "Some regions will underfill the plan, others will overfill," the source says. The Kremlin is losing many men in its bloody push for the rest of Donetsk, but recruitment numbers are running at roughly two times the level of losses.

The bloggers appear confused about who is to blame for their plight. Mr Alyokhin has, oddly enough, rejected criticism from commentators that the Kremlin machine has spun out of control. He writes that his problems stem not from Mr Putin's "dictatorship", which he rather likes, but his "liberalisation", which has allowed "some people...to seize control from the president". Stranger still, he lamented that a Western-style independent judiciary might have guarded loyalists like himself against "reputational damage". As a victim of an earlier purge might have put it: "Comrade Stalin, there's been some terrible misunderstanding." ■

Germany's coalition

The kids are fed up

BERLIN

Young MPs are threatening the coalition over pensions

JOHANNES WINKEL used to be a huge fan of Friedrich Merz, the German chancellor. At 2019's annual gathering of the Junge Union (JU), the youth organisation of the Christian Democratic Union (CDU) and the Christian Social Union (CSU), its sister party, he distributed posters saying "More Sauerland for Germany". (Sauerland is Mr Merz's home region.) Today Mr Winkel is the JU's head and a member of parliament, and he has backed Mr Merz through thick and thin.

Until now. Last weekend, at this year's JU gathering, Mr Winkel demanded that Mr Merz change a draft pension-reform law that has already been approved by his cabinet. He says the draft law will incur added cumulative costs of €120bn ($139bn) between 2032 and 2040, because it treats a temporary bolstering of pensions until 2031 as a benchmark for future levels. The coalition agreement struck in April between the CDU/CSU and the Social Democrats (SPD) promised to keep pensions at 48% of the average monthly salary (they would otherwise fall to 47%), but only until 2031. Mr Winkel and 17 other young MPs vowed to vote against the draft law, which they argue unfairly burdens the young. Some 20 older MPs might join the rebellion. Mr Merz has a majority of only 12 in the Bundestag, Germany's parliament.

Mr Merz was planning to push the bill through in December. It also includes an "active" pension (a tax break aimed at encouraging pensioners to work longer) and an expansion of the *Mütterrente*, a benefit mostly claimed by mothers to compensate parents for years spent raising children. The SPD rejects any modification of the draft bill. On November 18th Bärbel Bas, the SPD labour minister who wrote it, said that the JU needs to decide whether it wants the government to fail.

This looks like the coalition's most serious conflict since Mr Merz became chancellor in May. He had promised to push through reforms this autumn. "All the disappointment over Merz's failure to deliver an 'autumn of reforms' is expressed in this rebellion," says Moritz Schularick, head of the Kiel Institute for the World Economy.

Could Mr Merz stay in power without the SPD? On November 17th the embattled chancellor said that going ahead with a minority government would be "out of the question". It would probably require him to rely periodically on support from the Alternative for Germany (AfD), a xenophobic populist-right party. This is unacceptable for Mr Merz, who staunchly defends the firewall that his and other German parties have maintained to exclude the AfD from government.

Mr Merz has several options for dodging the threat to his coalition. He could simply postpone the vote on the draft bill, thereby kicking the can down the road a bit. He could assign Jens Spahn, the head of the CDU/CSU parliamentary group, to negotiate concessions from the SPD, such as amending the draft law to remove the guarantee of pension levels beyond 2031. The Social Democrats, however, do not seem to be in a giving mood. Lastly, Mr Merz could try to placate the mutineers, perhaps by including Mr Winkel and Pascal Reddig, another CDU rebel, on a pension committee that is to present a more comprehensive reform next year.

The pension protesters certainly have a point. Even Jens Südekum, an academic who advises Lars Klingbeil, the SPD finance minister, says that using the 48% level as the basis for calculations beyond 2031 is financially "hardly manageable". Next year the federal government plans to spend a quarter of its total budget of €525bn on state pensions.

In the early 1960s there were six German workers for every German pensioner. Today the ratio is two to one, and the demography keeps deteriorating. Statutory pension contributions, split between employer and employee, have risen to 18.6% of salaries, and are on course to increase still more. The chancellor conceded at the JU's gathering that the additional burden on the younger generation cannot be justified. But he is a hostage to the frailty of his coalition, which he has little choice but to keep alive at all costs. ■

Pensive on pensions

CHARLEMAGNE

All aboard the EU omnibus

Europe is on a deregulation drive. Will it go anywhere?

POLITICIANS KEEN to flaunt their dislike of excessive bureaucracy have a wealth of visual metaphors to choose from. Javier Milei wooed Argentine voters by wielding a chainsaw. Donald Trump has been photographed cutting Washington's metaphorical red tape with oversize gold scissors. Britain's David Cameron once promised a risky-sounding "bonfire of regulations". Still, that left plenty of clichés for the European Union's top brass to choose from, when they recently—and belatedly—embarked on a bid to lighten the continent's bureaucratic burden. Perhaps a pressure-washer to cleanse the statute books? A sledgehammer to reduce unwanted regulation to rubble? Not quite. The prop picked for the EU's efforts to roll back officialdom is the omnibus, the most plodding means of transport known to man. (It is also a piece of euro-jargon used to describe a catch-all legislative proposal.) In terms of dynamism, the image lacks a certain *je ne sais quoi*.

Europe's regulatory cake is multilayered; one might call it a bureaucratic *mille-feuille*. Citizens and companies are subject to edicts from every rank of government, at local, regional, national and EU level. They must hope one tier's rules do not contradict another's. Businesses spend around €150bn ($173bn) a year in a frenzy of form-filling. A regulation adopted three years ago requires large firms to provide up to 1,155 data points on what is happening in their global supply chains, in effect forcing them to recruit box-tickers dedicated to tracking Indonesian labour conditions and the like. Citizens are no better off. Internet doomscrolling these days requires batting away repeated "cookie" requests from each website, supposedly for the benefit of Europeans' privacy. In Spain professionals known as *gestores* have sprung up to help locals wrangle with the bureaucracy: they are part fixer, part therapist for those traumatised by endless paper-shuffling. Across Europe housing projects are delayed as report after report is commissioned to establish the mating habits of some local toad.

It turns out all that bureaucracy is bad for economic growth—who knew? Europeans who worry that they are falling further behind America, and failing to innovate at China's pace, have turned lately to talk of competitiveness. Last year a report by Mario Draghi, a former Italian prime minister, proposed a raft of measures including cutting red tape, deepening the single market and massive investment to boost productivity. But European governments lack the spare cash to splurge on innovation, and completing the single market requires taking on entrenched interest groups. Bashing excessive bureaucracy is what's left.

So, with the zeal of the convert, the European Commission has begun taking on red tape. It is a paradoxical place to start. The EU's executive arm is to rule-making what Taiwan is to microchips and Champagne is to sparkling wine: the undisputed world champion. Between 2019 and 2024 the bloc passed nearly 14,000 legal acts. No facet of daily life has been left untouched. Everything from the fruit content of marmalade or the weight of paper used in official correspondence is mandated from on high. Even the future has been regulated with anticipatory gusto: rules hemming in artificial-intelligence models were drafted, in large part, even before Silicon Valley had devised the models they were to regulate.

The EU's original plan had been not to cut regulation so much as to avoid adding to it. In 2021 it promised that at least one piece of legislation would be cut for every one coming into force. When that proved insufficient, a plan for "simplification" was devised—the EU would keep the old rules, but make it easier for businesses to comply. The aim was to cut the cost of meeting regulation by 25%, for example by gutting those pesky supply-chain regulations. But lately Ursula von der Leyen, the commission's president and thus the person holding the omnibus's steering wheel, has begun speaking of outright "deregulation". That means scrapping rules. What will be left for the *gestores* to do?

Six wide-ranging omnibus laws have already been tabled, taking in everything from supply-chain disclosure and farming to defence. On November 19th an overhaul of EU digital diktats was unveiled, rowing back on the hastily devised AI rules. Another fleet of omnibuses is expected by year end, with more to come in 2026. The tone has changed in EU circles. Until recently staff crowed of "the Brussels effect", whereby companies from across the world were made to bend to EU rules if they wanted to sell stuff to European consumers—often forcing American firms to adopt them across their global operations for simplicity's sake. Now the mantra is that Europe should avoid overreaching, and accept that its way of regulating business is not necessarily best.

Omnibus, meet roadblock

Alas, the EU's decision-making red tape is itself holding back the red-tape-chopping efforts. The first omnibus law, which included shredding the supply-chain rules, was announced in February, but has yet to be formally adopted. After initially being voted down by the European Parliament, the measure went through last week thanks only to the support of right-wing populist MEPs. This is politically noxious for centrists like Mrs von der Leyen.

The EU's bid to curb batty regulations is clearly welcome. But the passengers on Mrs von der Leyen's omnibus are entitled to feel a bit whiplashed. This columnist certainly is: the commission officials who boast to him of cutting what they describe as ill-considered burdensome regulations in 2025 are in some cases the very same ones who drafted the rules that came into force in 2024. And for every omnibus gearing up to deregulate, there is another vehicle headed in the opposite direction. By the EU's own estimates new laws currently in the pipeline could add around €80bn a year to annual business costs—far more than is being cut. That will leave plenty for future omnibuses to take on. All aboard! ■

Britain

Asylum policy

Inspired by Vikings

Britain wants to copy Denmark's asylum policies. It might end up with Denmark's dismal record on immigrant integration

ON NOVEMBER 17th two successful ethnic-minority politicians debated immigration and race. Both were gloomy. Shabana Mahmood, the home secretary, said that migration had made Britain "a more divided place". Kemi Badenoch, leader of the Conservative Party, warned that people were growing angry and hateful.

Ms Mahmood was outlining some dramatic changes to Britain's asylum system. Arguing that Britain had become soft , she declared that the state would drop its legal obligation to support destitute asylum-seekers. She pledged to water down human-rights laws that prevent deportations (see next article) and to evict more families from the country.

The home secretary also promised a new approach to people whom the government agrees to protect against harms like violence and persecution. Most people get refugee status for five years and can apply for citizenship soon after that. In future, Ms Mahmood explained, they will be granted asylum for 30 months. They can apply for further 30-month terms, but may be rejected if their home country has become safer. Some will have to wait 20 years for citizenship.

Ms Mahmood and Ms Badenoch are right that Britons are obsessed with immigration. Polls by Ipsos show that more Britons describe it as an important national issue than say the same of anything else. The public focuses on asylum-seekers, ie people applying for refugee status, whose numbers reached a record 108,000 last year. Those crossing the English Channel in inflatable dinghies, who number about 40,000 a year, loom larger in people's minds than much bigger groups of migrants such as workers and students.

The inspiration for Britain's tough new line comes from a country that is mentioned seven times in a government policy paper released on November 17th. Denmark toughened its asylum laws in the early 2000s. Following a surge in claims a decade ago, it went further, making refugee status temporary and threatening to confiscate migrants' jewellery. Asylum claims soon fell sharply (see chart on next page). Of special interest to Labour politicians who are terrified by their party's slide in the polls, the centre-left party that enacted many of these changes stayed in power.

Labour has a huge majority, and Ms Mahmood is a capable politician who should be able to see through most of her changes. But two dangers lurk. The first is that the reforms will not have the promised effect. The second is that, in copying Denmark's asylum system, Britain will end up emulating Denmark's broader and much more mixed record on immigration.

Asylum-seekers notice and respond to policy changes, but less alertly than British ▸▸

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politicians tend to believe. Sunder Katwala of British Future, a think-tank, points out that some of Ms Mahmood's reforms were also promised by a (Conservative) predecessor, Priti Patel, in 2022. The next year the government announced it would block many people from claiming asylum in Britain, and send them to Rwanda. The number of applications hardly budged.

The government cannot change some things that draw asylum-seekers to Britain, such as its large immigrant population and global familiarity with its language. Nor does it seem inclined to change one thing that makes the country an attractive second-chance. Continental European countries use a fingerprint database to check if asylum-seekers have already applied elsewhere in Europe, and try to send them back there if so. Britain, since it departed from the EU, cannot do the same.

Britons associate Denmark with butter and *hygge*, and rate it highly, although (with apologies to the Danes) not as highly as Norway or Sweden. Social policies can sound more plausible when described in Scandinavian accents. But Denmark's record on immigration is mixed. It has done a fine job of slashing asylum applications but a poor job of assimilating immigrants. Britain's record is the opposite.

In Britain, natives and foreign-born people have almost identical employment rates, and migrant employees earn more. In Denmark, by contrast, natives are employed at substantially higher rates than immigrants or their descendants. The PISA education tests carried out by the OECD, a club of mostly rich countries, show that the children of migrants fare poorly in Denmark and well in Britain. Indeed, migrants' children in Britain score higher in both maths and reading than native Danes.

The two countries have different immigration traditions. Like many European countries, Denmark opened its labour market to "guest workers" in the 1960s, implying that anyone who arrived was temporary. Britain drew from its current and former colonies. Although Commonwealth migrants suffered appalling racism, they clung to the view that they were fully British, and eventually ground almost all white Britons into agreeing.

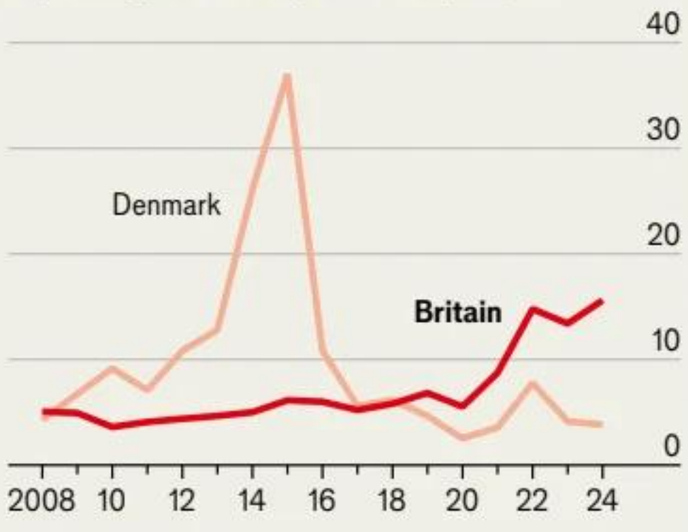
Eva Singer, the head of asylum at the Danish Refugee Council, says that her country sends mixed messages to refugees. Parts of the state work hard to get them up to speed, teaching them Danish and getting them training and work experience. Meanwhile the national government reminds them that they are only in the country temporarily. Confusion and insecurity are probably bad for integration.

Citizenship helps enormously. Christina Gathmann of the Luxembourg Institute of Socio-Economic Research has shown that, in Germany, migrant women's fortunes were transformed by reforms that allowed them to become citizens. Not only did they earn more, they married later and had fewer children. Research on refugees in Europe finds much the same. Ms Gathmann suggests that citizenship sends two signals—to a migrant that he or she is secure, and to an employer that a person will stay put, so might be worth investing in.

Ms Mahmood thinks that making refugees less secure will deter many from coming. And by placing some of those that do make it outside mainstream British society, she is in effect trying to shore up multiculturalism. It may or may not work in practice. It is certainly a peculiar theory. ■

Something rotten?

Asylum applications* per 10,000 people



*Includes dependants

Sources: Eurostat; ONS; House of Commons

Human rights

Taking back control

Tightening how courts interpret international law could work

IN A RECENT British court ruling an Albanian criminal was spared deportation, in part because his son disliked foreign chicken nuggets. Sending the child back would have violated his "food sensitivities"; deporting only the father would have violated his family life, protected under the European Convention on Human Rights (ECHR). The *Daily Express* called the decision "clucking mad" (a higher court intervened).

As Britain struggles with immigration, pressure has grown to do something about its relationship with the ECHR, and the court in Strasbourg which is its enforcer. The populist Reform UK party and the Tories believe the ECHR constrains Britain's ability to deport people, including foreign criminals. Opinion is volatile: in July 58% of Britons still wanted to stay within the ECHR, according to More in Common, a pollster; by October just 46% did.

Rather than leaving, the government is proposing sweeping changes. On November 17th it announced an overhaul of the asylum system (see previous article), including plans to reset Britain's relationship with the ECHR.

By ratifying it in 1951, the first country to do so, Britain promised to uphold 14 rights, including freedom from torture and degrading treatment (Article 3) and respect for private and family life (Article 8). In 1998 the Human Rights Act enshrined the convention into domestic law. If an asylum claimant exhausts their options in the British courts, they can appeal to the court in Strasbourg, which makes the final judgment. In practice it blocks few deportations. But the ECHR's impact is felt as much in Home Office decision-making as in domestic court outcomes, as officials try to anticipate who might win on appeal.

The government now plans to draft legislation to tighten how British courts apply the ECHR. Stricter interpretation of Article 8 will place more emphasis on the public interest when weighing someone's removal, and the circumstances in which people can make "family-life" claims—as with the chicken-nugget dad—will be narrowed. It also plans to lobby for a change in Article 3, to prevent people from claiming that dangerous prisons or unsafe hospitals back home constitute a form of torture.

There is precedent. In 2014 the Conservative-led coalition government passed legislation instructing judges to consider specific factors when deciding whether to remove someone, such as their ability to speak English. A marked drop in appeals followed. Successful challenges by foreign offenders due to be expelled fell from 337 in 2012-13 to 92 in 2015-16. With a strong record in upholding human-rights law, Britain can probably count on some leniency from Strasbourg. Since 1980 the court has overruled Britain in a deportation or extradition case only 13 times.

Leaving the ECHR would make Britain an outlier in Europe. Renegotiating it would take years. Tightening how domestic courts interpret the law is Labour's least-worst option.

BAGEHOT

Man panic

Is there actually a crisis among British men?

THERE IS NO better place to consider the state of British men than horizontal on a gym bench, arms quivering beneath two 27.5kg dumbbells, under the gaze of Rachel Reeves's parliamentary private secretary (PPS). A little after 4.30pm on a Friday, Vibes Gym in Shefford in Bedfordshire contains half a dozen young men wielding heavy lumps of metal. Joining them in front of the graffiti screaming "DARE TO BE GREAT" are Bagehot and Alistair Strathern, the local Labour MP.

When not passing parliamentary gossip to the chancellor, Mr Strathern is co-chair of Labour's "Men and Boys Group". He is worried about them. They die younger than women. They do worse at school. They are more likely to kill themselves. There is a split between the politics and social attitudes of young men and young women. Men with retrograde views on women enjoy large followings online, and are subject to panicked documentaries by the BBC ("It's been called a masculinity crisis," warns the narrator).

Such concerns are in season. November is a month for men. It is a time when men grow "Movember" moustaches (the manliest facial hair) to raise awareness for things such as prostate cancer (the manliest cancer). To mark International Men's Day on November 19th, Labour launched a men's health strategy (in partnership with football's Premier League). Earlier this month, the Booker prize was awarded to "Flesh", which features a monosyllabic Hungarian bloke who says "OK" a lot, in between killing a man, having lots of sex and beating up his stepson, bringing another bout of media discourse over whether men are "OK".

Are they right to worry? Some problems are undeniable. Boys have lower academic performance than girls. They are also less likely to go to university, often leading to lower wages. They have shorter lives as a result of unhealthy habits as well as their propensity to fall off things (hospital admissions for scaffolding accidents are almost as gendered as for childbirth). Beyond that, however, the idea of a crisis crumbles.

There is a gap between the views of young British men and young women. But this is largely an age effect, rather than a cohort one, argues Dr Roderik Rekker of Radboud University in the Netherlands. Views diverge in adolescence, when the young are at their most awkward and disagreeable, and then slowly merge again. Young people today are no different from young people yesterday when it comes to gender split. The kids are alright. Or at least as alright as their parents were at the same age.

Even then, the gap is hardly a chasm in Britain. A man aged between 18 and 25 is slightly more authoritarian than a woman of the same age, according to the British Election Study. Yet that still makes him more liberal than a woman aged between 26 and 35. If liberals must worry about the Zoomer boy, perhaps they should worry about his older sisters, never mind his parents.

Outside panicked editorials about Andrew Tate, king of the online misogynists, there is little evidence of regression among young men when it comes to attitudes to women. About 8% of male British Zoomers say they have a fairly low opinion of young women, or slightly lower than the 10% of all women who think the same, according to YouGov, a pollster. Young men have a much lower opinion of young men. But then so does every other group.

Still, the idea that young British men are drifting inexorably right remains a persistent myth. It may be more true in, say, America, where a majority of young men voted for Donald Trump. In Britain, in general, young men are, like young women, left-wing. The government would canter to another majority if they were the only ones who could vote. If only young women could vote, Labour would be replaced by the Green Party, which is tearing through voters on Labour's left. British politics has a male gaze. A shift among young women comes second to a largely imagined one among men.

Between sets in Vibes Gym, Mr Strathern rightly says that Labour needs to do far more to win over men without degrees. An electorate solely of men who skipped university would give Nigel Farage a North Korean majority, according to More In Common, a pollster. But more young women without degrees would also vote for Reform than Labour if an election were held tomorrow. Can Labour speak for non-graduates of any gender? Worries about men are often worries about class with a Movember moustache.

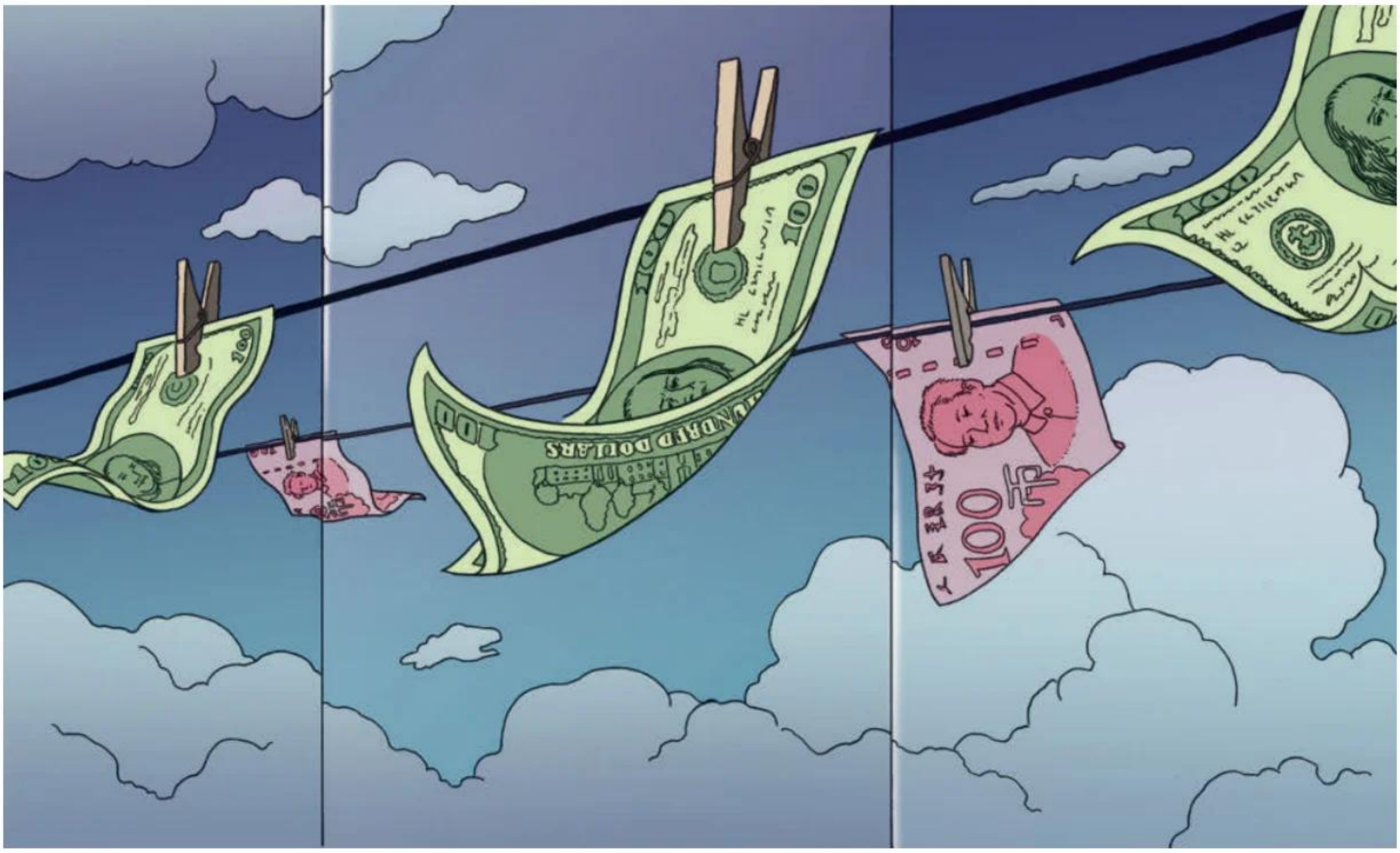
If politicians struggle to reach young men, it is because they struggle to reach anybody. The media have fractured. Young men spend too long staring at phones, gorging on whatever slop the algorithm ladles onto the screens between sets in the gym. But so do their grandparents, albeit on a sofa. Should Mr Strathern and his ilk crack it for young men, they can crack it for everyone.

Hath not a bloke eyes?

After all, disillusioned men are little different from Britons as a whole. More In Common created a cohort solely of grumpy men. Their concerns were almost exactly in line with the rest of the country's, moaning about the NHS, the economy and energy bills. They are a little grumpier about small boats in the Channel and a bit keener on improving the quality of their mobile-phone signal.

What gaps there are between young men and the rest of society are usually confined to the gym. Young men are far more likely than older men to think that physical strength, assertiveness and competitiveness are virtues. Yet there is no reason these traits should be toxic. Why can't self-improvement be a centre-left thing, wonders Mr Strathern? The alternative is to leave this message to the insane or the dangerous, he argues while handing over the pair of 27.5kg dumbbells that Bagehot regards with mild alarm. Only a desperation not to be outmuscled by Ms Reeves's PPS pushes them up. Perhaps fragile male ego has its uses, after all. ■

International



Financial crime

Rinse, repeat, remit

SINGAPORE

How China is dominating international money-laundering

CHINESE FIRMS have dominated almost every legal industry they have entered, from steel to ships, batteries to electric vehicles. They drive down costs and prices and cause no end of consternation in rich countries that are seeing their own manufacturing shrink (see Briefing). Now Chinese underground organisations are taking over one of the world's biggest illicit industries—the international money-laundering networks that facilitate crimes from drug smuggling to cryptocurrency theft by North Korean hackers.

Since money-launderers do not publish quarterly reports it is difficult to know exactly how large their industry is. America's Treasury department has estimated that around $154bn in illicit proceeds—mainly from the sale of illegal drugs in America by cartels based in Mexico—flow through China each year. That suggests Chinese networks launder most of the cash spent on illicit drugs in America, a sum estimated to have come to $153bn in 2017 by the Bureau of Economic Analysis, which conducted the most recent credible study. "Chinese money-laundering networks are global and pervasive," wrote Andrea Gacki, the director of the Treasury's Financial Crimes Enforcement Network, in a note in August urging banks to be vigilant.

Like many other Chinese industries moving into new markets, its money-launderers have squeezed out competitors by driving down costs and innovating. Older money-laundering services have been unable to compete with the efficiency, reach and low fees of these Chinese networks. In the past, Mexican drug traffickers often used black-market peso exchanges, which would launder dollars by paying for goods exported from America to Mexico, which would then be sold for pesos. Since these networks were linked to cartels, anyone involved faced "a constant risk of violence, theft and law-enforcement intervention", according to Chris Urben, a former agent with America's Drug Enforcement Administration. Previously, launderers would charge a fee of 7-10%. But the new networks charge only 1-2%, a result of which is that they "essentially took over in a bloodless coup", says Mr Urben.

They can also operate at scale. In February hackers in North Korea stole nearly $1.5bn in the largest cryptocurrency heist in history. They were able to launder almost $100m a day, according to TRM, an investigations firm, probably with help from Chinese underground bankers who split dirty money into multiple smaller transactions, mixing them with clean funds and different cryptocurrencies.

The success of Chinese money-laundering networks is due to a mixture of technical innovation, China's trade surpluses and, most important of all, its strict capital controls, under which people may take no more than the equivalent of $50,000 a year out of the country. This combination has created the opportunity for a three-way trade that allows drug smugglers to get illicit dollars out of America (or pounds out of Britain), Chinese peo-

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ple to get yuan out of China, and recycles the proceeds into pesos or just about any other currency that the drug cartels want.

To understand how this works, start with the most common and elegant method these networks use to wash money: the mirror transaction. The mechanics are deceptively simple. The first step is that a drug cartel moves cocaine or some other narcotic to America, where it is sold for dollars. Now imagine a wealthy mother in Shanghai who wants to buy a flat for her son studying in New York. She contacts a broker online who matches her with someone selling American dollars. The mother transfers yuan to a bank account in China controlled by the broker. Almost simultaneously the broker arranges for the equivalent in American dollars (minus a small fee) to appear in an American account that this mother has access to. The deposit for the flat is ready. No money ever crosses international borders in this second step.

In the third step the broker, who might operate almost anywhere in the world where there is a Chinese diaspora, has to reimburse the drug cartel in the currency it wants. Some of the yuan in China might be used to buy chemical precursors used to make fentanyl, a synthetic opioid, in Mexico. Or yuan might be used to buy legitimate Chinese goods that are exported to Mexico or any other country whose currency is required. No paper trail connects the various mirror transactions. The only evidence is on messaging apps like WhatsApp and Telegram. But American law enforcement authorities lack access because the apps are end-to-end encrypted: police cannot tap them as they used to tap phone lines. "We're operating as if we're back in the Stone Age," says Mr Urben.

Previous money-laundering networks, such as those established in the 1980s by Colombian cartels, were dismantled through extraditions, asset seizures and co-operation between America and Colombia. Yet the Chinese networks may prove far harder to disrupt. Though generally run by people with links to China, they operate across far more jurisdictions, serve wealthy clients alongside criminals and exist in the gaps between incompatible financial systems. Moreover, because they also service several underground industries, the sums involved are staggering. Online scams run by gangs of Chinese origin in South-East Asia alone generate the equivalent of around $500bn a year in proceeds. Some is reinvested back into the industry, but much of it needs laundering.

Underground banks have numerous ways to disguise illicit funds in addition to the three-way mirror transaction described above. Sometimes money is moved using fake invoices and phantom shipments, in addition to actual exports. Or money is washed through casinos. In the early 2000s rich Chinese would pay yuan to middlemen known as "junkets" who arranged gambling trips to Macau. Upon arrival, these clients would find casino chips waiting for them. After placing a few small bets, they could cash out their "winnings" in Hong Kong dollars and deposit the funds in Hong Kong banks or transfer them further abroad.

Launderers often mix and match multiple techniques. One case illustrates the scale of the laundering infrastructure that criminals have built. In October American prosecutors unsealed an indictment against Chen Zhi, a Cambodian businessman who built Prince Group, ostensibly a property development and financial-services conglomerate. But it was also one of Asia's largest criminal empires, allege prosecutors, who have charged him with money-laundering and wire fraud (see Asia section). Mr Chen, who held citizenship of Cambodia, Vanuatu, Cyprus and St Lucia, was born in Fujian, a province in south-eastern China where some of the world's most notorious money-launderers and cyber-criminals come from. After an anti-corruption crackdown in 2012 many of these criminals fled abroad, mostly to countries in South-East Asia, including Cambodia, Myanmar and the Philippines.

As early as 2018 Prince Group was allegedly stealing billions of dollars from online scams that brought in $30m a day. By 2020 Mr Chen had amassed 127,271 bitcoin (worth $15bn when it was seized last month). To clean that money, he relied on sophisticated laundering networks: cryptocurrency-mining operations that were among the world's largest, online gambling platforms, shell companies and professional laundering services that mixed illicit funds with legitimate ones, according to the indictment. Prince Group and Mr Chen deny any wrongdoing.

This way of blending seemingly legitimate businesses with money-laundering operations is used throughout Chinese underground-banking systems. Huione Guarantee, a Chinese-language online marketplace, was set up in around 2021 to trade property, cars and other goods and services. It handled billions of dollars a year, according to Elliptic, a blockchain-analytics firm that has tracked the growth of Huione. But along with its legitimate business, it was allegedly a one-stop shop for criminals: a kind of Facebook Marketplace for fraud. (Huione and its affiliates have denied any wrongdoing.)

In October the Treasury Department stopped Huione Group, its parent company, from accessing America's banking system, accusing it of being a "critical node for laundering proceeds of cyber heists carried out by the Democratic People's Republic of Korea". It also laundered money for criminals involved in online financial scams known as "pig butchering", in which fraudsters win the trust of victims before stealing their money. The Treasury reckons it moved at least $4bn in illicit proceeds between August 2021 and January 2025.

Clicks and mortar

Not all the transactions are virtual, especially when laundering networks need to insert cash back into the legal banking system. To do so they often recruit money mules—unwitting teenagers or poor people whom criminals use to open bank accounts and move money without revealing their own identities. In 2022 Daniel (not his real name), a young Singaporean man, was working as a dishwasher. A friend asked if he wanted to make $600 (double his monthly wage) by opening a few bank accounts in Singapore. Within weeks he was receiving bank statements with transactions of hundreds of thousands of dollars. Daniel says he knows five people who were also recruited as money mules. He was one of the lucky ones. Some of his friends ended up in jail.

Similar techniques are used elsewhere. Britain's Treasury noted in a recent report to Parliament that Chinese criminal banking networks use Chinese students as money mules and cash couriers. Sometimes accounts are opened using fake addresses by corrupt bank employees. In one case, Bank of America said it had "uncovered illegal activity using its monitoring systems, terminated the employees and co-operated with law enforcement, who successfully prosecuted those involved."

Although countries including America and Britain are taking action against these networks, and are successfully prosecuting some, they are playing a game of whack-a-mole. Shutting them down for good requires close co-operation with China, which these days is in short supply. ■

THE TELEGRAM

The loneliness of America's model ally

Donald Trump has no desire to play global cop. That is tough on Denmark, a loyal sheriff's deputy

THESE ARE bracing times for America's most feckless allies. President Donald Trump has turned his wrath on free-riders with puny armed forces, who ignored years of requests to do more. If those laggards feel friendless in a dangerous world, much of the blame is on them. But this is a frightening moment, too, for a smaller group: countries that spent decades trying to be useful to America, their superpower protector. Often, helpful partners fall into one of two camps: those that contribute useful services to an alliance, and those that hold territory in strategic places.

Until recently, Denmark imagined that it ticked both those boxes. A country of picture-book prosperity, near the top of global rankings for the contentment of its 6m people, Denmark is too small to deter enemies alone. For decades Denmark's solution has involved signalling that it is an unusually willing member of NATO. After the fall of the Soviet bloc ushered in a unipolar age, led by an America ready and able to police the world, Denmark ditched years of semi-pacifism to become an eager sheriff's deputy. Anders Fogh Rasmussen, prime minister from 2001-09, then NATO secretary-general from 2009-14, dates this "fundamental change in mindset" to the first Gulf war in 1990-91, when Denmark sent a warship to enforce a UN blockade of Iraq. Deployments in the Balkans followed. After the September 11th attacks in 2001 Danish expeditionary forces served alongside Americans in Afghanistan and Iraq, later joining NATO air strikes on Libya.

During America's war on terror after 2001, Denmark rarely applied the "national caveats" used by other allies to exempt their forces from the most dangerous missions. Denmark lost more troops in Afghanistan as a share of its population than almost any other coalition member. Today Denmark is one of the largest contributors of aid to Ukraine, per person.

Unfortunately for Denmark, a small but fearless deputy, America has lost its appetite for policing the world. That impatience with "endless wars" began under Barack Obama and intensified under Mr Trump. Addressing naval cadets earlier this year, Vice-President J.D. Vance, who served in Iraq, denounced previous American governments for sacrificing lives to "lofty, often incoherent abstractions" about promoting democracy and other Western values far from home.

If Denmark can no longer serve America in expeditionary wars to build a kindlier world, it still has useful territory to offer, in two separate places. The Danish mainland guards the entrance to the Baltic Sea, a vital route for Russia's navy. Then there is the vast Arctic island of Greenland, a Danish colonial possession since the 18th century. A narrow sea passage between Greenland, Iceland and Britain was a NATO hunting ground for Soviet submarines during the cold war. Greenland lies under a flight path for missiles and warplanes heading for America. At the height of the confrontation with the Soviets, America stationed thousands of troops, early-warning radars and long-range bombers on Greenland. A treaty with Denmark from 1951 gives America almost free rein to deploy forces on the island. That created a "Greenland card" so valuable that American governments tolerated Denmark's often left-leaning foreign policies towards the end of the cold war.

Under Mr Trump, alas, useful Greenland has become a point of painful dispute. Briefly in his first term, and more insistently since returning to office, Mr Trump has declared that America must own the island, and will not rule out the use of force to take it. He correctly accuses Denmark of underinvesting in Arctic defences. But his claims that Denmark has left Greenland exposed to Russian and Chinese predations ignore America's own armed forces on the island, centred on a missile-defence base. Mr Trump can expand their presence as he wishes under the existing 1951 treaty. Other Trump officials have suggested that Greenland's worth lies in its critical minerals. Yet American companies could open mines there without their president invading Greenland.

The 57,000 people of Greenland mostly favour independence from Denmark, and have not forgotten abuses by past colonial administrations. That does not mean they want to become Americans. In island-wide elections this year, Greenlanders voted against radical secessionists who want to end Danish rule quickly, if need be with Mr Trump's help. Against that, Greenland wants American investments and is willing to exploit its strategic location to that end, says Ulrik Pram Gad of the Danish Institute for International Studies. Denmark can no longer play the Greenland card, "because the Greenlanders want to play it for themselves".

Fear of abandonment becomes fear of the bully

Denmark is not walking away from America, says the chairman of the Danish parliament's foreign-policy committee, Christian Friis Bach, noting it has ratified a new agreement welcoming American troops on Danish soil. "But there is a fear that America will walk away from us." Mr Friis Bach called it a gut punch when Mr Vance said that Denmark was "not a good ally" and did not deserve to own Greenland. The politician cites Denmark's Afghan death toll in rebuttal. Unhappily, those casualties earn less credit with men like Mr Trump and Mr Vance, who deem that campaign a blunder.

Dangerous changes are afoot, fears Mr Rasmussen, towards a world order "where the big powers make the decisions and very often over the heads of smaller and weaker neighbours". Denmark is duly hedging. It is spending billions of dollars on new weaponry, both American and European. In a big move, the kingdom is buying long-range missiles that can hit Russia. It has abandoned its legal opt-out from European Union defence co-operation.

Denmark, like its European neighbours, will remain dependent on America to deter Russia for many years. But it is hard to see trust in America recovering. Fecklessness cuts both ways. ■

Business

American business (1)

Insider capitalism

NEW YORK

The returns to access to power and privileged information are soaring

EVERYONE IS A populist these days. President Donald Trump has directed his fury at elites in politics, academia and commerce. The spirit has captured financial markets, too. Cryptocurrencies, say their advocates, do away with the need for rent-seeking intermediaries; prediction markets allow anyone to bet on anything. Tech bosses speak directly to their adoring investors on podcasts, rather than through newspapers. Wall Street bigwigs talk about markets being "democratised", which in fact means opening up financial risk to everyone.

The returns to being an insider—someone with status, access to power or privileged information—ought, then, to be falling. Instead, they are soaring. First, consider the fact that Mr Trump, the ultimate insider given his power over policy, is profiting extravagantly while in office, mostly through crypto deals. Second, chief executives are scrambling for inside access to the president. Third, the explosion of prediction markets means the value of inside information has never been higher.

Start with the president's family business. In his first term, concerns that Mr Trump was profiting from the presidency focused on the Trump Organisation's hotels in Florida and Washington. This time the bigger deals are overseas. On November 17th the firm said it would build a hotel in the Maldives, one of at least eight projects under way with Dar Global, a Saudi developer. Often Mr Trump's ventures receive red-carpet treatment. In May Pham Minh Chinh, the prime minister of Vietnam, attended a ground-breaking ceremony for a development near Hanoi while the country negotiated tariffs imposed by the White House. This month Serbia's parliament passed a law to tear down the ruins of a landmark building bombed by NATO to make way for a Trump hotel.

There are few limits to what the president will put his name on. The lobby of Trump Tower in Manhattan contains a Trump-themed café, grill, sweet shop and whisky bar. But how much does he make? Mr Trump's financial disclosures for 2024, before his second term began, show licensing income of $22m from deals with Dar. The president earned more than $20m from clothes, fragrances and other memorabilia, including $1.1m for endorsing a range of MAGA-themed guitars. Revenue from Mr Trump's golf clubs and hotels in America was around $350m, though the amount of profit is unclear.

But these gains pale in comparison with the wealth the president has built in digital markets. His stake in the parent company of Truth Social, the loss-making social-media firm which went public by merging with a special-purpose acquisition company (SPAC) last year, is worth $1.2bn.

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Then there's crypto. After selling his own brand of non-fungible tokens (NFTs) between presidential terms, Mr Trump began to see assets with little fundamental value as sources of concrete riches. As president he has also aggressively promoted the deregulation of the crypto industry. In January Mr Trump launched $TRUMP, his own meme coin, reportedly earning his family at least $300m. World Liberty Financial (WLF), a crypto firm run by a son of Steve Witkoff, Mr Trump's envoy to the Middle East, previously listed the president as its "chief crypto advocate". Three-quarters of the proceeds from the sale of its tokens flow to DT Marks DEFI LLC, an entity linked to the Trump family. In March WLF said it that had sold $550m-worth of tokens to global investors, implying a profit of $413m on the deals.

Mr Trump's sons, Donald junior and Eric, manage the president's business interests, which are held in a trust (the family has often denied there are conflicts of interest). But they are accumulating their own influence. Donald junior has joined the boards of PublicSquare, a "cancel-proof" online marketplace, and GrabA-Gun, a discount arms-dealer, and is an adviser to Unusual Machines, a drone company with government contracts. He has invested in Thumzup Media, a marketing company which buys crypto, and, along with his brother Eric, American Bitcoin, a crypto company which markets itself heavily. Eric is also an adviser to Metaplanet, a Japanese bitcoin-treasury firm, and a board observer at ALT5 Sigma, which buys tokens from WLF.

The revival of investors' enthusiasm for SPACs this year has helped. GrabAGun listed its shares by merging with one. In August the brothers said that they planned to raise $300m by listing their own SPAC. The revival of SPACs has also been good to Cantor Fitzgerald, the investment bank formerly run by Howard Lutnick, the commerce secretary, now run by his sons, which is the largest underwriter of SPAC deals this year. Donald junior and Eric are advisers to and investors in another investment bank, Dominari Securities.

This meme-inflected, crypto-funded world has the sons of Mr Trump, Mr Lutnick and Mr Witkoff at its centre. All sorts of characters shoot through their orbit. One is Justin Sun, a Chinese-born investor who previously served as the representative of Grenada to the World Trade Organisation. His crypto company, Tron, was an early buyer of WLF's tokens. Early this year the Securities and Exchange Commission (SEC) paused its crypto market-manipulation case against Mr Sun (which also accused celebrities including Soulja Boy, a rapper, of undisclosed promotions of digital currencies). Then, in May, Mr Sun dined with Mr Trump after becoming a big holder of $TRUMP coin. In June he took Tron public through a deal with SRM Entertainment, a small toy company. Dominari arranged the deal.

What do America's chief executives think of the Trump family business? "Nobody gives a shit," is how a top lobbyist puts it. One reason is that the first family's deals are mainly small and crypto-focused, meaning that they rarely interact with big firms. Another explanation is that bosses find the erosion of norms around conflicts of interest an acceptable cost for other benefits, such as deregulation.

The biggest incentive for silence, though, is that big companies themselves need insider access. Good relations with the president have become business-critical. The tools bosses use to win favour with the president include splashy investment plans, ballroom donations and old-fashioned flattery (see next article). Tariff exemptions, merger approvals and even state investment are large enough prizes that shareholders cheer them on.

Besides, worrying about "conflicts of interest" feels quaint in business circles today. Elon Musk is perhaps the biggest beneficiary of this mood. He secured the largest pay deal ever from Tesla's shareholders, after threatening to shift his attention elsewhere within his web of companies. Of the ten most valuable firms in America, a further three are controlled by the men who built them. Delaware, shaken by a run of large firms reincorporating elsewhere, recently passed a law which makes it much easier for controlling shareholders to influence transactions and pay deals which benefit them.

Information is the third pillar of the insider economy. The growth of Kalshi and Polymarket, the Coke and Pepsi of the prediction markets, is astonishing. With around $2bn of wagers placed each week on the two platforms (both of which employ Donald junior as an adviser), they are four times bigger than they were this summer. Their markets are talked about on every trading floor and in every executive office. At their present size they allow informed individuals to wager against dumb money on a market too small to attract sophisticated institutions. They also make insider trading much more attractive.

Insider trading has been a tough sport since the 1960s, when courts started to crack down on those trading on information that doesn't belong to them. Apart from being sold or admitting massive fraud, there is little a company can say which will reliably cause its shares to soar or plummet. Access to sensitive information is tightly controlled. However, on prediction markets, where typical wagers involve betting on the outcome of a basketball game, *Time* magazine's person of the year or the number of times Jerome Powell says "tariff" in a press conference, bets are more precise and the tools used to track insiders are likely to be less sophisticated.

Eye-catching moves have taken place. The odds of María Corina Machado winning the Nobel peace prize spiked in the hours before her win was announced. The boss of Coinbase blurted out "bitcoin, ethereum, blockchain, staking and web3", influencing the result of the small market wagering on what he would say on the firm's earnings calls.

And unlike cases involving stocks, which are mostly handled by the SEC, prediction wagers are regulated as derivative contracts by the Commodity Futures Trading Commission (CFTC), which has much less experience at enforcing insider-trading rules. Regulators have tried to expand their legal theories to new markets before, not always successfully. In July an appeals court overturned a conviction for trading NFTs on inside information. A case brought recently alleging that a group, which included a current NBA basketball player, profited from inside information in gambling markets could provide a crucial precedent for prediction platforms.

Coining it

Courts, then, might put some brakes on insider capitalism. Will other checks ensure the phenomenon does not endure? Much of it, after all, is intertwined with exuberance in markets; the president's crypto empire in particular will suffer if the current rout in the asset class continues. The next president is unlikely to be as commercially minded as Mr Trump, or to demand nearly as much fealty from bosses. And prediction markets might, in time, put off punters if they feel they are certain to lose to better informed participants. Until then, though, it pays to be on the inside. ■

American business (2)

Trump 2.0: a user's guide for CEOs

NEW YORK

When and how to suck up, shut up and stand up to the president

IN ORDER TO grasp corporate America's conflicted feelings towards Donald Trump a year after his election, one Wall Street boss proposes the following thought experiment. Imagine you fell asleep on November 6th 2024, the day after his victory over Kamala Harris, his Democratic opponent, and woke up today.

A snapshot of the world looks pretty much as you would have expected it to—which is to say glorious. American GDP outgrowing the rest of the rich world? Check. Corporate-tax cuts? Check. Wall Street types in charge of treasury and commerce departments? Check. The de facto average tariff rate for goods of 10% is, admittedly, a shade higher than you thought. But then so is the S&P 500, which despite a wobble in recent days is beating analysts' forecasts from 12 months ago, thanks to the artificial-intelligence boom. With trustbuster-in-chief Joe Biden out of the White House, "merger Mondays" are back; one week this month began with the announcement of three mega-deals worth a combined $70bn. The Federal Reserve has, as predicted, lowered interest rates. Most important, profits are up—and then some.

When you learn how things got to where they are, though, you rub your eyes. The president raised import duties in April on most of America's trading partners, then moved them up and down in ways that were hard to fathom. The S&P 500's ascent from some $50trn in aggregate market value on November 5th 2024 to $60trn or so now included a $7trn tumble between election day and the start of his trade war. He has tried to sack a Fed governor (unsuccessfully so far), get private companies like Intel and Microsoft to fire executives he disapproves of (likewise), and force individual law firms he dislikes to take up MAGA causes pro bono (many succumbed). Things get more shocking still: the state holds a "golden share" in US Steel (now in Japanese hands), owns stakes in a bunch of rare-earth miners plus 10% of Intel, a struggling chipmaker, and wants a 15% cut of Nvidia's and AMD's chip sales to China.

At this point you pity the chief executives who have had to stay awake through it all, enduring what a conservative lobbyist likens to "riding a roller-coaster in the dark". As with a theme-park ride, dealing with Mr Trump and his unconventional administration requires a sturdy stomach and a hard head. It also requires a strategy. The one most companies have adopted can be summed up as shut up, suck up and think twice before standing up to the president.

Many businesses' main political objective is to stay "out of the cross-hairs", in the words of an investment banker. American shoppers are grumpy in surveys but spendthrift in stores. "The worst-case scenario for tariffs keeps getting better," says a Wall Street rainmaker. Companies feel they will do just fine so long as they do not give the president a reason to single them out—certainly for punishment but also for praise, which a misstep can turn into censure.

When Elon Musk fell out with the president in June, Mr Trump went from being Tesla's chief salesman, at one point turning the White House into its dealership, to threatening to strip it of federal subsidies. Similarly, having defended Apple against EU regulators in January, by May Mr Trump was warning of a 25% tariff on iPhones after the company said it would assemble more of them in India rather than at home.

Ballroom tango

If invisibility is not an option, either because a firm is too large, too prominent or too tariff-prone, it can try ingratiation. This can be comical, as when Tim Cook of Apple presented Mr Trump with a gold trinket in August to commemorate an additional $100bn investment in its American business. It can be cringeworthy, as when Mr Cook's firm joined at least 20 others, from four of its big-tech rivals to old-economy stalwarts such Union Pacific Railroad, in donating to Mr Trump's $300m White House ballroom. As it happens, Union Pacific and another railway, Norfolk Southern, are seeking an $85bn merger, which was approved by shareholders on November 14th and needs the thumbs-up from a federal regulator.

Some of the ballroom donors' bosses abhorred buttering the president up this way. But, a financier recalls hearing from one who felt icky, "It is what it is." Sucking up is a part of life for CEOs. JPMorgan Chase, America's biggest bank, whose chief executive declined to donate to the ballroom lest it be perceived as "buying favours", has vowed to channel $1.5trn into promoting "security and resiliency", a Trumpian priority. Under Mr Biden, it pledged $2.5trn in climate-friendly investments dear to Democrats' hearts.

Supplication is often subtler. A veteran corporate lawyer in New York advises clients with an eye-catching merger in the works to inform the White House well in advance of any announcement. Springing a surprise may allow a rival to lobby against it. The need for such forward planning is, the lawyer says, "new". A financier who supported Mr Trump calls it "nuts". All actions involving the administration must be similarly deliberate. "The last thing you want is to raise prices while you are down there fighting for exemptions [from tariffs]," says a New York business bigwig.

Quiet pre-emption is made easier by the fact that, in contrast to the bunker-like Biden White House, this one talks to business constantly. "Speaking publicly is not effective," notes a Wall Street CEO. He and his peers can talk to the president any time, he says. "We are just not doing it ▸▸

Nothing a firm handshake and a gold trinket won't fix

through you [the media]." A counterpart in the health-care industry says that every time he asked for access to Mr Trump, "I got it within a day." What does he tell the president once he gets him on the line? "I try not to bring him my problems, but bring him a solution—a solution he will like and that will solve my problem."

The concerns—over tariffs, state interventionism, the slow pace of deregulation owing to Mr Trump's foot-dragging on nominating hundreds of lower-level bureaucrats who can actually unmake the rules—go instead to the relevant cabinet secretary. Most often that means Scott Bessent at the Treasury and Howard Lutnick at Commerce.

Mr Bessent gets mixed reviews. Some bosses excuse the former hedge-fund manager's increasingly Trumpy TV appearances as the price to pay for internal clout, which they value. Others believe that, as one puts it, "[his] grovelling is how you lose influence". The foot-in-mouth Mr Lutnick universally elicits eye-rolls. "The only person [in the administration] I trust to do the right things is Donald Trump," confesses another New York boss and Democratic donor, "and he has mostly done the right thing" by eventually rowing back on his most harmful ideas. A consumer-goods executive notes that her company prefers a different arms-length route, via Trump-friendly trade unions such as the Teamsters, Mr Trump's personal friends and his eldest son, Donald junior.

Taking the administration on is verboten. Most large companies are quietly cheering for the handful of small firms fighting the government in the Supreme Court over Mr Trump's use of emergency powers to enact his sweeping tariffs. Yet none has submitted a formal brief, as they have historically done in cases of material importance to their operations. A lawsuit against Mr Trump's new $100,000 fee for H1-B skilled-worker visas was filed by the US Chamber of Commerce, a venerable umbrella group which offers safety in numbers. A finance tycoon would love to see thousands of besuited professionals march on Washington, as lawyers did in Pakistan in the late 2000s in protest against the suspension of the chief justice. But he isn't holding his breath.

Do firms fear reprisals? Absolutely, echoes boss after boss (all of whom asked not to be named). But even more than that, they fear continued unpredictability. Mr Trump and his government "do policy deal by deal", grumbles one. This leads companies to focus not on building better products but wrangling exemptions, war-gaming responses to government offers you can't refuse or finding ways to stay off the radar. With another three years of Mr Trump's presidency to go, they are at least getting the hang of how to go about it. ■

Day care in America

Pay to play

GREENWICH

Private equity is reshaping the child-care business

A SPOT AT Little Friends, an independent child-care centre in Greenwich, Connecticut, is highly sought-after. Parent testimonials are glowing. The waiting list is years long. Yet the competition for enrolment may not be as fierce as the competition to buy it. Verna Esposito, who founded and runs the centre, has watched for years as private-equity firms have snapped up struggling rivals. They would gladly add her centre to their ranks. "They email, they call—they even sent me a Christmas gift," she says. "It's relentless."

As the covid-19 pandemic disrupted the child-care industry, large firms acquired small providers at low valuations. Firms run by private-equity shops now control 10-12% of America's child-care market, measured by total capacity. Eight of the 11 largest child-care providers are owned by private equity.

Private equity's bet is two-pronged. First, there will be economies of scale. Child care is a fragmented industry, mostly made up of independent providers. Consolidating such businesses is a hallmark strategy of private equity. Big chains can centralise procurement and use technology to streamline administration. Second, they can charge more. Enrolment fees at the Primrose School, a private-equity-owned chain, can be about 50% higher than those of independent centres nearby. That parents would pay was not certain—on average, spending on child care makes up 9-16% of median family income. But it seems to be working. Chains enjoy operating margins of 15-20%, say insiders.

It is easy to see the appeal of large chains. Parents find it hard to judge the quality of independent centres. Chain facilities often look shiny, new and clean. Scale makes it easier to offer flashy technologies, like apps that update parents on milk consumption and naps. If a child at a centre is neglected the entire business suffers, encouraging high standards. Opting for a chain may therefore seem less risky.

Yet child-care centres cater to two customers: parents and the child. Parents may be mollified by shiny facilities and apps—but babies tend to do best when paid lots of attention by trusted caregivers. It is less clear that private-equity backed chains provide this. They tend to pay staff poorly. In Connecticut, teachers at KinderCare earn $16.49 an hour; those at Little Friends get $21.50 an hour, plus benefits. A former director at a chain backed by private equity says hiring good teachers at such low wages was nearly impossible, forcing her to retain staff unfit to care for children. In forums, day-care workers moan about chains operating "at ratio", meaning they must care for the maximum number of children state rules allow. Such tactics make bathroom breaks a logistical nightmare.

Lawmakers are worried. In 2024 Massachusetts passed a bill that limits how much public funding large for-profit chains can claim, which will hurt private-equity operations. Vermont capped tuition-fee rises for publicly funded providers after Little Sprouts, a French chain backed by private equity, acquired local centres. Yet the government is rarely adept at setting prices or pay. Looking after children could be about to get even messier. ■

Barbarians at the preschool gate

E-commerce in India

Moving markets

MUMBAI

Indians are getting more fashionable

IT WOULD BE a stretch ever to describe Mumbai's Hill Road as deserted. But the shopping street does look a bit less packed lately. Business has not been the same since the pandemic, says Sheikh Aziz, who along with his brother runs a pair of shops selling children's and women's garments for between 250 and 350 rupees ($3-4). They blame the internet. "Why should people spend money on a rickshaw to come here when they get whatever they want sitting at home?" he says.

Every Indian city has at least one district dedicated to inexpensive, unbranded clothing, filled with small traders like Mr Aziz, who form the backbone of Indian markets. Four-fifths of India's $1trn in retail spending last year—and three-fifths of the $100bn spent on fashion—took place in shops and stalls like his.

That started to change with the pandemic. A mobile-broadband boom some years earlier had caused the price of data to plummet; so a bored country used its spare time to explore online shopping. E-commerce platforms doubled their share of the fashion market to nearly 15% between 2019 and 2024, according to HSBC, a bank. That is still well below China and America, where 40% of fashion is purchased online. But it is growing fast.

Driving the shift are companies like Meesho, an e-commerce platform backed by SoftBank, a Japanese tech investor. The number of people buying goods on the platform in the past 12 months hit 199m this year, up from 2m in 2020. Last month the company filed paperwork to go public at a hoped-for valuation of $7bn-8bn. Though it is just one of several platforms dedicated to fashion, which include Walmart-owned Myntra, it is the one that competes most directly with Mr Aziz. Shoppers can get hold of a sari at the rock-bottom price of 266 rupees—including delivery.

The three-dollar sari illustrates two big shifts occurring in the Indian marketplace. The first is structural. Platforms like Meesho are dragging small Indian businesses—which is most of them—away from the inefficient, unorganised market and into the formal economy. Five years ago 85% of Indian retail was informal. By 2030 the share is likely to fall to around 66-68%, according to Meesho's prospectus.

The second shift has to do with market size. E-commerce platforms open up new opportunities for vendors, expanding their horizons from a neighbourhood to the entire country. Amazon and Myntra mostly cater to big cities. But at Meesho's prices, says an analyst, the market is in effect "unlimited". Meesho is attractive to small sellers because it does not take a commission and instead charges fees for delivery and advertising. That allows it to keep costs low and take market share from street vendors, rather than competing with e-commerce rivals. Amazon and Myntra have recently launched low-cost fashion arms.

The corollary of a bigger market for sellers is an expansion in customer choice. "What has changed in the past four-five years is access," says Joseph Sebastian of Blume, a venture-capital firm. Back then shoppers had to travel to urban centres or market towns "because there was nothing around you where you can spend", says Avi Mehta of Macquarie, a bank. India's unreliable postal system and incomprehensible addresses made e-commerce delivery uneconomic. But the rise of startups such as Delhivery, a firm built around a weak pun, as well as the in-house logistics arms of the big e-commerce platforms, has made it possible to send goods to the most remote parts of India. Nine in ten of Meesho's shoppers live outside of the country's eight biggest cities.

Taken together, these shifts hint at a change that transcends business and transforms society more broadly. Social media and e-commerce have boosted the aspirations and consumption of small towns. Mr Sebastian, who grew up in a small town in Kerala called Kattappana and now lives in Bangalore, says he can see the change when he returns. In his youth big-city trends would reach his town years later. Now, he says, "young people there look a lot like young people in Koramangala," a hip corner of Bangalore. ■

It's cheaper online

Artificial intelligence

Loop the loop

LOS ANGELES

Cracks are appearing in OpenAI's dominant façade

THE 21ST-CENTURY tech landscape was built with a winner-takes-all mindset. It started with Microsoft's Windows monopoly at the end of the 1990s. Since then Alphabet-owned Google has cornered search and Amazon has become the king of e-commerce. Meta, too, has blanketed much of the world with social media—though on November 18th a judge in Washington, DC, spared it the ignominy of being declared a monopolist.

No surprise then that with the rise of generative artificial intelligence (AI), everyone has jostled to be, if not the outright winner, then at least on the winning team. Since it launched ChatGPT in late 2022, OpenAI has been the one to beat. But its dominance is under threat. That was underscored on November 18th when Microsoft and Nvidia, two big backers of OpenAI, threw their weight behind Anthropic, a big rival to the maker of ChatGPT, that has hitherto been financed by Amazon and Google. On the same day, Google threw down the gauntlet with a new model.

The Anthropic deal bears many of the hallmarks of the spending exuberance that has characterised the AI boom. Nvidia and Microsoft pledged to invest $15bn in Anthropic, which, in turn, will spend $30bn on Microsoft's Azure cloud platform over an unspecified timeframe, underpinned by Nvidia's AI chips. Not long ago such circularity, with OpenAI at the centre of the merry-go-round, dazzled markets. Now investors are spooked; Microsoft's shares fell by 3% after the announcement.

The reverberations from OpenAI's promiscuity partly explain the change of sentiment. Gil Luria of D.A. Davidson, an investment firm, dates the sell-off in tech stocks this month back to September, when OpenAI agreed to spend $300bn over five years on computing power from Oracle, and Nvidia, in turn, said it would invest up to $100bn in OpenAI.

That marked the start of $1.4trn of spending commitments by OpenAI, which has raised fears in financial markets of a binge by uncreditworthy borrowers to finance new AI data centres. On November 19th Nvidia provided news that assuaged those concerns. It reported record sales in the third quarter, and raised its fourth-quarter revenue forecasts above Wall Street's expectations. "There has been a lot of talk about an AI bubble. From our vantage point we see something very differ- ▸▸

ent," said Jensen Huang, its CEO.

Anthropic's three-way arrangement is a reflection of Nvidia's bullishness. For the first time, the AI lab will train its models on Nvidia's chips. Details about the terms of the Nvidia and Microsoft investments were sketchy, but CNBC reported that they valued Anthropic at about $350bn, up from $183bn in September, which would bring it closer to OpenAI, valued at $500bn. The *Wall Street Journal* reported that Elon Musk's XAI, another frontier lab, was in talks to raise $15bn at a $230bn valuation.

It's not just the AI labs that are putting pressure on OpenAI. On November 18th Google released its latest model, Gemini 3, which it said would improve AI features on its search platform, as well as coding and other tools. Gemini has 650m monthly average users, which is still well shy of the 800m that OpenAI says use ChatGPT on a weekly basis. But it is trained on Google's own chips, rather than Nvidia's, giving it potentially a big cost advantage. On November 19th Alphabet's shares jumped to record highs, partly on the belief that it may be catching up with OpenAI.

For users, the more competition the better. It means the AI labs will continue to keep prices down by burning cash. But it may also bring fears of an AI bubble from public to private markets. The more competition there is, the harder it will be for the labs to generate the revenues needed to justify the spending splurge—not to mention their stratospheric valuations. ■

BARTLEBY

When companies lose their way

Refounding is the idea of rediscovering a firm's essential character

ON ELLIOTT HILL'S first day on the job as chief executive of Nike, in October 2024, he gave a presentation to his staff. His opening slide had two things written on it. One was that Nike was a sports company. Mr Hill, who began his career as an intern at the firm, reckons that it had lost its obsession with sport. Nike had its origins on the running tracks of Oregon in the 1960s; refocusing on athletes, the secret to its prior success, is at the heart of the CEO's turnaround strategy.

At around the same time as Mr Hill was starting his job, another new chief executive, Brian Niccol of Starbucks, was also resetting the direction of a big, struggling brand. In an open letter published during his first week, Mr Niccol announced his plans to get "Back to Starbucks". "There's a shared sense that we have drifted from our core," he wrote. His goal is to make the coffee chain less transactional, a place where people want to gather and linger as well as watch queue-jumpers grab mobile orders.

This back-to-the-future strategy—returning a company that has lost its way to the values and strategy that had made it successful—is very common. So common, in fact, that Jon Iwata of the Yale School of Management has given it a name: "refounding". Mr Iwata says that individual decisions to move into a new market or launch a new product can be completely rational: Starbucks' mobile-ordering system was a boon during the pandemic, for example. But the cumulative effect of such decisions can be to pull a company badly off course.

Sometimes, the refounder is an actual founder. When Steve Jobs made his return to Apple in 1997, his diagnosis was that the firm had stopped doing the basics well; among other things, he slashed the product range. Before Mr Niccol's elevation, Howard Schultz, the man who built Starbucks, had made more comebacks than a stand-up comedian.

But often, as in the case of Messrs Hill and Niccol, it is a fresh face who is appealing to old values. Kelly Ortberg, the newish CEO of Boeing, is trying to restore the aerospace company's badly dented reputation for engineering excellence; one of his first moves was a literal one, to Seattle, where the firm's commercial airlines are made. In the early 2000s, Lego moved its product line away from the brick, the very thing that made it Lego, and paid a heavy price; a non-family-member CEO was the one to return it to its core.

Firms cannot stand still, of course: hence the second statement on Mr Hill's opening slide last year, that Nike is also a growth company. Bosses don't survive for long with an attitude of everything is just dandy. Executives with their eye on the top job have to say what they would change as well as what they would keep. Mark Thompson, a coach and co-author of a new book called "CEO Ready", recommends that during an appointment process, inside candidates for the top job write an activist-style letter in order to get the board focused on a firm's weak spots. This ceaseless pressure to grow means that over time, it is easy for firms to drift away from their core activities.

The trick, therefore, is to grow in a way that is consistent with what makes a firm special. One way to do this is to articulate a firm's essential character, against which strategies can be judged. Defining a company by its products risks being too constraining. Netflix shipped 5.2bn DVDs in total from its founding in 1997 to the closure of the business in 2023, but did not fixate on them as the only way to distribute films.

Purpose statements risk going too far the other way: they can often end up being a soufflé of meaningless words about excellence and innovation. Mr Iwata's own definition of organisational character is meatier: a mixture of an enduring need and a distinctive capability. Disney, for example, found success by satisfying consumers' enduring need for escapism through a distinctive ability to create immersive worlds.

Refounding moments are not always necessary. Some firms were completely right to escape their roots: Samsung started out selling noodles and probably should not get back into that business. And any definition of what makes a company special is subject to retrospective wisdom: firms that do well must have retained their essence and firms that stumble must have lost sight of theirs. But the frequency with which firms are lost and refounded is still a useful reminder to bosses—that it never hurts to codify what a company is really good at, and to use that as a guidepost for big decisions.

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Too big to fill

Think replacing a bad CEO is hard? Try replacing an exceptional one

TIM COOK seems like a nice problem for Apple's board to have. Since he took over from Steve Jobs in 2011, the iPhone-maker's boss has lifted annual sales from $108bn to $416bn, operating profit from $34bn to $133bn and market capitalisation from around $350bn to $4trn, equivalent to roughly $700m for every day of his 14-year tenure. Only Jensen Huang of Nvidia has created more shareholder value overall, but most of it in the past two frantic, AI-fuelled years. Only Satya Nadella of Microsoft and Sundar Pichai of Alphabet, two big-tech counterparts, have generated more on the average day, but check again in a few years' time, when their tenures match Mr Cook's today. No CEO comes close to his record of producing nearly $1trn in cumulative net income.

This unrivalled performance does, though, come with a catch: how on earth do you replace someone like that? Two years ago Mr Cook told Dua Lipa, a pop star with a podcast, that "I love it there and I can't envision my life without being there. And so I'll be there for a while." In recent days, however, the *Financial Times* hinted that this while may be shorter than expected, reporting that Mr Cook may stand down as early as next year. Apple's enviable finances mean the shoes he will leave his successor are comfortable—but also uncomfortably large.

Apple is not the only corporate giant preparing a peer to succeed someone widely regarded as peerless. On November 14th Walmart announced that Doug McMillon, who has steered the world's largest retailer through international expansion, a global pandemic and a digital reinvention, will in January hand over to the boss of its American business after nearly 12 years. Days earlier Warren Buffett, an icon of America Inc, said he was "going quiet" ahead of his imminent retirement after six decades in charge of Berkshire Hathaway, a textile mill he has woven into a $1trn investment powerhouse. Jamie Dimon, about to celebrate 20 years as head of JPMorgan Chase, the world's most valuable bank, is no longer joking that his exit is five years away—and always will be.

Although the average tenure of an S&P 500 boss fell from 11 years in 2021 to eight in 2024, nearly one in five of the blue-chip index's constituents is led by a "marathoner CEO" serving a decade or more. Such companies tend to be more successful than average, with a typical market value of $59bn and total five-year shareholder returns (including dividends) of 93%. That is respectively twice and almost three times the median for the 200 or so firms whose bosses have been in place for three years or less. Naturally: otherwise the board would have looked for someone else.

Unsurprising, then, that when marathoners do finally hand over the baton, those selected to carry it often stumble. "You don't want to be the person who follows the legend," a headhunting adage goes, "you want to be the person who follows the person who follows the legend." Or, indeed, the person after that. It took GE 17 years and two failed attempts to find a worthy successor to Jack Welch, who led the industrial conglomerate for 20 years until 2001. Nike is on its second flat-footed boss since Mark Parker's tremendous leg from 2006 to 2020. It is too early to tell if Kelly Ortberg, appointed last year to lead Boeing, can pull the plane-maker out of a prolonged nosedive following the departure in 2015 of its last successful pilot, James McNerney.

Successors do not have to be a disaster to be disappointing. Spencer Stuart, an executive-search firm, looked at marathoner-CEO succession in the S&P 500 between 2000 and 2024. It found that 85% of the replacements were company insiders, and that 66% of those internal hires generated lower total returns than their predecessors, relative to the market. Worse, nearly half of the marathoners' replacements, be they insiders or outsiders, actually trailed the S&P 500 as a whole on that measure.

How can companies minimise the chances of this undesirable reversion to the mean? First of all, they must take succession planning seriously. Although most large firms have such plans on paper, in practice many boards merely pay them lip service. As self-serving as headhunters sound when they bang on about how the search for a next chief executive must start the moment the new one is redecorating the corner office, they are not wrong.

Paradoxically, the more that a board is hoping for both the current boss as well as the next one to be corporate endurance athletes, the sooner the search ought to begin. That is because, as Jim Citrin of Spencer Stuart explains, in such cases a firm may need to skip past the C-suite and look to younger generations for candidates. In contrast to the current senior executive team, rising stars will have plenty in the tank come the next transition a decade or more hence. But the striplings are also more numerous and less tested. Identifying promising ones is therefore easier if you start early, advises Mr Citrin.

Succession plans must also be constantly updated, particularly in times of rapid change. "The right person three years ago might not be the right person today," says Claudia Pici Morris of Korn Ferry, an executive-search consultancy. Three years ago no one had heard of ChatGPT and globalisation was less of a dirty word.

No Cookalikes, please

Third, especially in volatile periods like today, boards ought to seriously consider those unpopular outsiders. Walmart is culturally wedded to internal succession and the insular Mr Buffett was always going to pick a confidant. Apple looks poised to do the same. Yet it urgently needs to rethink its reliance on Chinese supply chains, belatedly devise an AI strategy and come up with a big new hit beyond the 18-year-old iPhone. Mr Cook's neglect of these challenges may be why Mr Buffett has been selling down Berkshire's Apple stake and buying Alphabet shares. Mr Cook's board should look for his successor farther from the tree. ■

Finance & economics

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Digital assets

Gravity wins

NEW YORK

Crypto got everything it wanted. Why is it sinking?

ON JANUARY 3RD it will have been 17 years since Satoshi Nakamoto, the pseudonymous founder of bitcoin, first unveiled the cryptocurrency. The most popular digital coin has cemented itself in the global financial order faster than any other asset. In recent years the crypto industry has gone from an object of mockery in mainstream finance and the target of outright hostility from regulators to being broadly accepted, even encouraged. Banks and asset managers are launching products and the latest cast of American regulators are crypto enthusiasts. In October bitcoin's market value peaked at $2.5trn.

Odd as it might seem, these victories now pose a problem for crypto. Prices have tumbled: bitcoin has dropped from an all-time high of around $126,000 in early October to just above $92,000. For a speculative asset—one which produces no income and relies solely on hopes for future capital gains—the absence of a fresh bullish narrative to justify further price rises is a challenge. And because wider acceptance has deepened crypto's links with other markets, the ripple effects from the dip will be felt far beyond the industry.

It is hard to say anything with confidence about the future direction of an asset like bitcoin. Many investors (and financial journalists) have tried, and failed. But there has been a clear pattern to rallies in recent years. Every exhilarating upswing has been bound up with optimistic stories about greater acceptance.

In 2020 and 2021 lockdowns and fiscal largesse were paired with the increasing provision of crypto trading by mainstream brokers. From late 2023 hopes rose that crypto exchange-traded funds would soon be launched. And, indeed, the first ETF applications were approved by America's regulators in January 2024. Donald Trump's election victory in November that year gave bitcoin another boost.

Today investors have no trouble getting their hands on bitcoin. Brokers offer access to a range of crypto assets to anyone with a phone. Some big investors have stayed away. This month crypto enthusiasts cheered the news that the Czech central bank had purchased $1m in bitcoin and other cryptocurrencies. But that was a drop in the ocean relative to the bank's $171bn in reserves. And most central banks still rule out including digital assets in their defensive hoards. The scope for higher trading volumes, then, seems limited.

The other price of victory is that the pain from a crypto crash will be felt more widely than in the past. The investors most exposed to the recent slump are those who behaved as if the boom would never end. That includes Strategy, a software company that is now mainly a leveraged bet on bitcoin, having borrowed to accumulate about $60bn-worth. The firm's market capitalisation is now below the value of its bitcoin holdings, raising the prospect of crypto fire-sales. It is not the only source of risk in the digital-asset universe. On October 10th some $19bn in leveraged crypto positions were wiped out after Mr Trump announced fresh 100% tariffs on China (the levies were walked back a few days later). No one knows how much leverage remains, but the further prices fall, the greater the risk of serial blow-ups.

The biggest risk of all is that miserable sentiment in cryptocurrency spreads to other markets. Since 2020 bitcoin has become more correlated with technology stocks. These could fall further if flighty crypto investors flee equity markets. The adoption of digital-asset products by mainstream financial firms has also bound crypto to traditional markets. BlackRock, which manages $13.5trn of assets, is custodian of the world's largest bitcoin ETF. ▸▸

One-third of the customers who bought into the fund as their first BlackRock product have gone on to invest in the firm's more classic ETFs. The European Systemic Risk Board, a financial watchdog, fears that the failure of a large crypto-investment product could spill across conventional finance. "The overall volumes have now reached levels that make this scenario a genuine concern," it wrote last month.

Stablecoins—crypto assets designed to hold their value and facilitate payments—are another source of overlap. The size of the outstanding market has grown by almost 50% in the past year, to more than $300bn. In July they won regulatory certainty in America, when the GENIUS Act set out the assets their issuers could hold.

But so far, most stablecoins are still used to transact in crypto rather than outside of it. That means bear markets in riskier crypto assets can drive outflows from stablecoins. Since these are mostly backed by American Treasuries, a shock could shake bond markets if issuers have to fire-sell assets to return cash to investors. Any stablecoin not fully backed with the safest assets may well "de-peg" and enter a bank-run-like spiral, accelerating liquidations.

Crypto may have exhausted most of the obvious catalysts for a proper rebound, from the greater ease of investment to more regulatory certainty. But one piece of news could just help it soar again. Enthusiasts got less than they had hoped for from the Strategic Bitcoin Reserve, set up by Mr Trump in March. It has remained a vehicle for bitcoin acquired mainly as a result of law-enforcement seizures.

Some legislators, including Cynthia Lummis, a Republican senator, have supported the purchase of more bitcoin on the open market. If the price continues to fall, advocates might call it a buying opportunity. Crypto fans close to the administration—many of whom will be nursing losses—might well agree. The prospect of the government stepping in seems remote. But when it comes to both crypto and politics, surprises can never be ruled out. ■

To the moon and back

Bitcoin price, $'000

Source: LSEG Workspace

Minimum wages

How high is too high?

EMERYVILLE, LONDON AND MEXICO CITY

Governments are pushing minimum wages to the limit—even as economists fret

IN THE BARRIO of Iztapalapa, on Mexico City's eastern flank, the pavements stay busy even in the punishing afternoon sun. Street vendors hawk snacks from metal carts; waiters from corner taquerías weave between tables and traffic; cashiers in the ubiquitous convenience stores ring up a steady stream of small purchases. Young adults in knock-off sportswear mingle with stooped, gap-toothed old folk. Outside a private-security firm, a sun-bleached façade is plastered with notices advertising for security guards at the legal minimum rate of 278.8 pesos ($15.20) per day.

Life in Iztapalapa can be hard. But for many workers it might have been worse without the striking recent increases in the minimum wage. Between 2014 and 2024 it doubled relative to median pay, from 37% of the middle income to 74%. It is the most extreme example of a worldwide trend, encompassing places far richer than Mexico. Over the same period Britain has increased its minimum wage from 47% to 61% of median earnings. South Korea's ratio has followed a similar trajectory. Germany introduced its first minimum wage in 2015; it is now worth 51% of median pay. New Zealand's pay floor is almost at Mexican levels, relative to its much higher incomes.

America's federal minimum wage, of $7.25 an hour, was last changed in 2009. Yet state and local legislators in Democratic areas have repeatedly raised local pay floors. California's is now $16.50 an hour, nearly double what it was a decade ago. In Emeryville, a small city that is home to Pixar, an animation studio, the local minimum is $19.90 an hour. All these initiatives make the federal minimum irrelevant, with less than 1% of workers across the country receiving it. Compiling data from a range of sources, we estimate that America's "effective minimum wage"—the wage floor covering the average worker—has reached around $12 an hour (see chart 1). It will rise even higher if Zohran Mamdani, New York's mayor-elect, follows through on a pledge to raise the city's minimum wage from $16.50 today to $30 by 2030.

Governments' embrace of high minimum wages is not a fad. It reflects the favourable attitude of many economists towards the policy since the turn of the century. Unfortunately, just as minimum wages are reaching new heights, the scholarly tide is turning again. The latest research suggests minimum wages may have nasty side-effects after all.

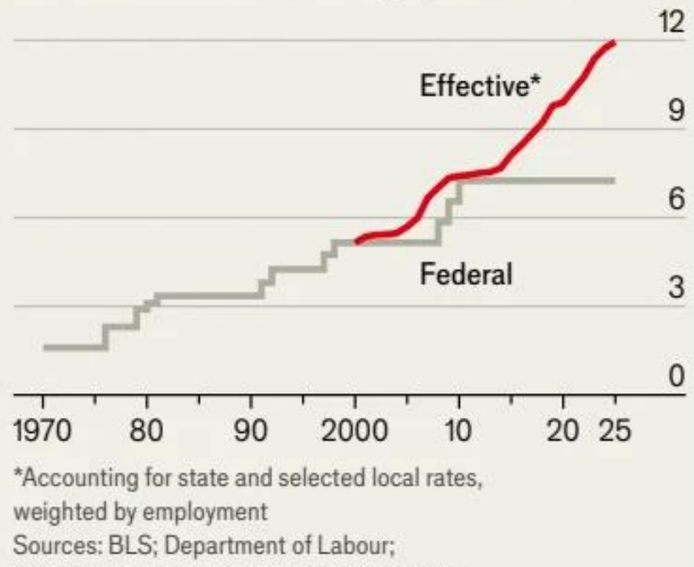
Economists had traditionally disliked minimum wages on the basis of simple supply and demand: compulsory high pay destroys jobs and pushes workers to the informal sector. In 1994 the OECD cautioned against the policy, favouring "direct" redistribution. But the same year landmark research by David Card and Alan Krueger, two American economists, was published, finding that a minimum-wage increase in New Jersey had not affected fast-food employment compared with neighbouring Pennsylvania. Others devised similar studies. Most found that minimum wages reduced employment, but only by a little.

That "little" got smaller and smaller over time—as a database of research maintained by Arindrajit Dube of the University of Massachusetts, Amherst and Ben Zipperer of the Economic Policy Institute, a think-tank, demonstrates. In the early 2000s the literature indicated that a 1% increase in wages caused by a higher minimum wage would lead to a 0.5% decline in employment. By the late 2010s the effect had fallen to around zero.

Sceptics disputed the "new" literature, claiming it was statistically flawed. "There is no consensus on the employment effects of the minimum wage," summarised Alan Manning of the London School of Economics in 2021, even if the effect is "elusive". (One earlier study found that support for minimum wages rose with physical distance from Chicago, the home of free-market economics.) But the pro-minimum-wage group had the ear of policymakers, who jumped at the chance to fight inequality without spending money. A review for ▸▸

Reality cheque 1

United States, minimum wage per hour, $



*Accounting for state and selected local rates, weighted by employment

Sources: BLS; Department of Labour; state and local governments; *The Economist*

the British government, written in 2019 by Mr Dube, concluded that "research from...developed countries points to a very muted effect of minimum wages on employment". Sure enough, the higher minimum wages of the 2010s coincided with a jobs boom in which the employment rates of prime-age workers in the rich world hit all-time highs (see chart 2).

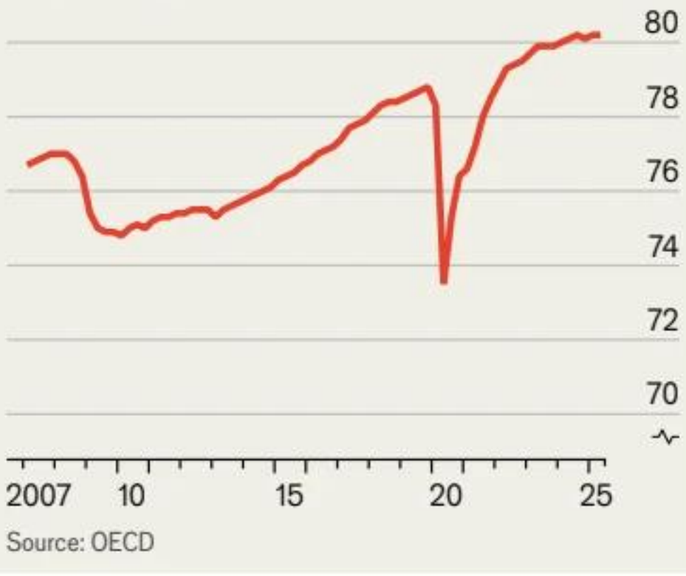
A counter-revolution was brewing, however. It first stirred in a study of minimum-wage hikes in Seattle in 2015 and 2016. Eventually published in 2022, the research tracking low-paid workers found that the policy caused a modest fall in their hours worked, even though they kept their jobs (and their pay rose overall). And although low-wage workers, on average, were not turfed out of work, the hiring of them slowed. By the third quarter of 2016 Seattle had 7.4% fewer low-paid jobs than a modelled counterfactual. This effect was lost in the overall employment figures because the city's highly paid professionals were in such high demand.

The same year a working paper by Erik Hurst of the University of Chicago and three co-authors argued that it takes time for the costs of minimum wages to show up, as firms adjust their business models. But eventually a large increase "reduces the employment, income and welfare of precisely the low-income workers it is meant to help". Modest rises in the minimum wage might also create false confidence. Offsetting the market power of big employers, which might otherwise suppress wages by hiring too little, means that modest minimum wages create jobs. But as the pay floor rises too high, employment suffers after all. The threshold beyond which a blanket minimum wage distorts the American economy is below $8 per hour, according to research published in June by David Berger of Duke University and two co-authors. One problem they find is that pay floors are one-size-fits-all: "A minimum wage that eliminates [market] power at one firm causes severe rationing at another."

Other research sets out the distortions minimum wages can cause that do not show up in raw employment numbers. Big increases in the wage floor lead employers to make working schedules less predictable, according to a recent working paper by Hannah Farkas of Columbia University, in effect making the job worse as it pays more. They lead to more workplace injuries, according to a paper published in 2024 by Qing Liu of Renmin University of China and his colleagues, perhaps because bosses push their workers harder. And they can cause firms to reduce their investment, according to a recent working paper by DuckKi Cho of the University of Sydney—a finding that will disappoint those who speculate that high minimum wages have the benefit of forcing companies to focus on raising productivity.

Work in progress 2

OECD countries, employment rate, %
25- to 54-year-olds



Source: OECD

Governments might tolerate a distorted economy in pursuit of higher pay. After all, minimum wages can be transformative. In Mexico income poverty fell from 50% to 35% between 2018 and 2024, meaning some 15.8m people had climbed above the poverty line. Although the law covers only the roughly 45% of workers who toil in the formal economy, it is believed to have dragged up pay in informal jobs too.

Yet minimum wages are a relatively wasteful way to redistribute cash. Many low-paid workers live in middle- or high-earning households which are in less need of help—think of a part-time second earner, or a rich kid with a holiday job. And when minimum wages rise, prices often go up in tandem. This disproportionately harms those on low incomes, according to Thomas MaCurdy of Stanford University, who in work published in 2015 found that the effect on prices in America was more regressive than a typical state sales tax. That effect is especially relevant today, with voters unhappy about high prices.

Even the correction of market power may benefit higher earners the most. Minimum wages cause a chain reaction of greater bargaining power that goes up the wage distribution, according to a recent working paper by Mark Bils of the University of Rochester and two co-authors, using data from Brazil. High earners gain most because it is specialised professionals over whom companies tend to have the most market power. For example, an ageing computer programmer who knows his own firms' systems backwards might struggle to find a comparable job, whereas a burger-flipper can move easily from McDonald's to Wendy's. When the effect of minimum wages cascades through the labour market, the programmer sees his next-best option improve a lot, and can therefore negotiate a big pay bump. The burger-flipper might just lose his job.

More is rarely enough

Does the new body of research chime with reality? For all that minimum wages have reduced poverty and inequality, they have failed to defuse the left-wing populism of the likes of Mr Mamdani. Employment may have boomed, but there is still widespread discontent over weak economic growth. And wonks are getting nervous.

In Mexico, the government promises continued double-digit annual increases. It is a popular policy; one Iztapalapa cashier says life on the current minimum wage is "very difficult". Yet economists fret that the minimum is as high as it should go. Britain is planning to scrap a lower rate for 18- to 20-year-olds, leading even the country's most prominent left-leaning think-tank, the Resolution Foundation, to warn the government that it should "tread carefully". After years of incautious rises in the minimum wage, that is sound advice for policymakers everywhere. ■

Visa restrictions

Brain waves

MUMBAI

Rich countries' tighter policies may hurt Indians. Might they benefit India?

GOVERNMENTS ACROSS the rich world are tightening migration policies in sync. New applicants for America's H-1B "high-skilled" worker visa must now pay an upfront fee of $100,000. Britain has reduced the length of its post-study visa from two years to 18 months, and has proposed a 6% levy on university fees. Canada has capped foreign-student numbers. According to the OECD, a club of mostly rich countries, the number of long-term migrants arriving for work in the rich world fell by a fifth in 2024 compared with the previous year. The number of those moving for study was down by 13%.

India is highly exposed. It supplies around 70% of H-1B applicants as well as about 30% of international students to America, more than any other country. Indians also make up 25% of international students in Britain and around 40% of those in Canada. In total 1.8m Indians are studying abroad. That reflects the sheer size of India's population, its English-speaking middle class and the long pipeline of engineers trained in its technical institutes. In the "big four" of English-speaking countries, as would-be applicants call them—America, Britain, Canada and Australia—the number of Indian students has dropped by roughly a quarter from last year, according to Indian government figures. This follows a sharp rise after the covid-19 pandemic.

Cutting mobility will affect India in three main ways. The first is a loss of remittances. Cash from emigrants is worth around 3% of Indian GDP, covering about 40% of its trade deficit. Rich countries became the dominant source for the first time in 2024, according to the central bank, overtaking the Gulf countries where migrants, many of them low-skilled, send large chunks of their pay-cheques back to their family. Those working in America are typically the best paid. A software developer in San Francisco can earn many times more than someone with similar skills in Bangalore, Hyderabad or even Dubai.

The eventual effect on remittances will depend on how long the restrictions last, argues Chinmay Tumbe of the Indian Institute of Management, a business school in Ahmedabad. Recently Donald Trump has wobbled on the subject, saying that America does not have all the talent it needs. That angered his base, some of whom detected a betrayal of America First principles. For now Indians in America are staying put and avoiding holidays back home, in case they get stuck. The restrictions also have a silver lining for India's balance of payments, points out Mr Tumbe. Fewer students abroad mean less money flowing out of India for their fees.

The second effect is that Indians are heading to new destinations. Germany has recorded a 68% rise in Indian students over the past two years as it relaxes its rules on skilled migration and expands English-language programmes. In Russia the number has jumped by 59%. Enrolments in France have risen by more than a third after it introduced foundation-year French-language courses and added more postgraduate degrees in English. That is creating new links between India and other countries, says Devesh Kapur of Johns Hopkins University. Over time, these might lead to other kinds of exports: in the 1990s it was the presence of Indian migrants in Silicon Valley that persuaded companies they could rely on outsourcing to India's IT giants to fix the millennium bug.

The third effect is that Western firms are moving more jobs to India to secure the talent they used to get at home. Wall Street banks have stepped up hiring at so-called global capability centres, in-house outsourcing arms that provide back-office services. These are no longer just call-centre jobs but increasingly core business functions, including quantitative modelling, AI research and pharmaceutical labs. Universities, too, are moving towards the students rather than waiting for the students to move to them. Deakin University and the University of Wollongong, two Australian institutions, have opened Indian campuses. Several British institutions followed the prime minister, Sir Keir Starmer, to Mumbai when he celebrated a trade deal with India: the universities of Bristol and York are planning campuses in the city.

The big challenge, suggests Mr Tumbe, will be persuading the best scientists to return to India, as China did with its own high-flyers, known as "sea turtles". A number of government schemes have been proposed to attract back researchers of Indian origin, but are still in their early stages. Even if they feel unwelcome in America, India's top scientists have other options. Besides Europe, Singapore and the Gulf, there is China, which launched a visa aimed at foreign science and technology talent shortly after America increased the H-1B fee. India, by contrast, offers worse pay, politicised universities and a lower quality of life in its polluted cities.

In the longer term, the restrictions will cut off a route to prosperity for both India and America. Economists argue that the migration of software engineers from India to America was neither a "brain gain" nor a "brain drain" but "brain circulation". The knowledge that high wages were available to the lucky few who came through the H-1B lottery encouraged Indian students to learn computer science and India's technical institutes to expand their courses. That provided talent for Silicon Valley but also for Bangalore, India's own tech hub. As did those who came back from America with skills and money, often starting their own businesses or investing in that of others. For the moment, one end of that circulation is still thriving. ■

Property

Bricks and mortal

NEW YORK

America's mortgage market is slowly dying, with dire consequences for house prices

IN AMERICA'S FOUNDATION myths, the humble mortgage rarely features. There are no stirring ballads about the heroism of 30-year rates or credit-scoring. Yet mortgages have fuelled the American dream, which centres on home ownership, ever since the federal government began subsidising property loans a century ago. Now that fuel is running low.

At $13.5trn, America's current stock of mortgage debt is equivalent to 44% of the country's GDP. That marks a drop of almost 30 percentage points since the global financial crisis of 2007-09, which was sparked by a binge on dicey housing debt, and the lowest level since 1999, before that property bubble got started (see chart 1). More striking still, mortgage debt has shrunk to just 27% of the value of American household property—a 65-year low. A great demortgaging is under way, with worrying consequences for the property market.

With Wall Street fretting about other corners of American finance, such as booming private lending to shaky mid-size firms, the tranquility of the mortgage market might seem like a sign of healthy restraint. In fact, it masks an insidious crisis. The median monthly principal-and-interest payment on an American home has surged from just above $1,000 to $2,100 in five years, buoyed by soaring interest rates and property prices. The availability of mortgages, as measured by lenders' appetite for risk, is at its lowest in decades.

The collapse in credit has two main causes. One is cyclical. Between the end of 2020 and October 2023 soaring inflation drove America's ten-year bond yields from below 1% to nearly 5%. At just over 4% today, they remain much higher than they were five years ago. As banks have repriced their mortgages, some prospective home movers have been priced out. Many others, afraid of losing the super-cheap financing they got during the pandemic, also stayed put. New mortgages run to less than 1% of total American housing wealth since 2022, compared with 3% during the height of covid-era refinancing, and well below levels seen before the financial crisis.

But most of the decline in lending happened before the pandemic, when rates were still low. That is because although few Americans can afford a mortgage, even fewer get offered one in the first place. In 2003, 35% of American mortgages were extended to borrowers with credit scores below 720. Between 2004 and 2007 that figure climbed to 45%, as lenders lavished funds on less creditworthy buyers, including "subprime" borrowers. It has since slumped to just 22% (see chart 2). American credit scores have improved since the boom that preceded the bust in 2007-09, but not enough to account for the larger shift in lending.

Much of this contraction can be explained by a drastic tightening in lending standards. That began in 2007, when Freddie Mac and Fannie Mae, two government-backed entities which guarantee the vast majority of American mortgages, restricted their purchases to higher-rated debt. Three years later, the Dodd-Frank Act, which revamped financial regulation, made lending to riskier borrowers an even lousier business. Interest-only loans were curtailed, and mortgage fees were capped. At the same time, the process of foreclosing on a home was made much slower.

The mortgage drought is preventing many homes from changing hands. Had the share of borrowing by lower-scoring households stopped its fall at 25%—still well below the level before America's ill-fated mortgage boom—*The Economist* calculates that lenders might have originated roughly $1.6trn in additional loans, equivalent to 8m mortgages of $200,000.

The drought is also stopping fresh supply from entering the market. If developers have no prospective buyers to sell properties to, they are much less likely to build at all. Kevin Erdmann, a housing analyst, notes that it took less than four years for the construction of American "multi-family" homes—condominiums and apartment blocks—to rebound to its 1990s average after the financial crisis. But, more than 15 years on, the construction of single-family homes still lags behind pre-crisis levels, even as, in many cities, the population keeps growing. The resulting housing crunch is especially clear in cities like Atlanta, Phoenix, Austin and Orlando. And as competition for tenancies gets ever fiercer, rents are hitting the stratosphere.

Housing affordability is consistently found near the top of rankings of voters' complaints. President Donald Trump blames the problem on the Federal Reserve, which, he says, is being too slow to cut rates. He has suggested letting homebuyers pledge cryptocurrency as collateral and scrapping capital-gains tax on home sales. After recent electoral drubbings for Republican candidates, he has also proposed creating 50-year mortgages.

The idea is unlikely to fly. John Lovallo of UBS, a bank, reckons switching from a 30-year mortgage to a 50-year one might cut monthly payments for a middling American home by $119. But for that to be possible, Congress would have to amend the Dodd-Frank Act to enable Fannie and Freddie to buy debt with extra-long maturities—a tall order in a divided legislature. Many borrowers remain frozen out of the mortgage market by stringent regulations anyway. That is unlikely to change soon. In private, some politicians admit that American lenders have been squeezed too hard. Campaigning for a new boom in subprime lending and easier foreclosures, however, is no one's idea of a winning ticket.

The market is finding new solutions. Sean Dobson of the Amherst Group, a property-investment firm, started packaging and trading mortgage-backed securities in the late 1980s, when the market for such instruments was booming. After Dodd-Frank was enacted, Mr Dobson observed that the subprime-mortgage market would probably remain closed for the rest of his career. But people who had previously bought modest homes would still need somewhere to live. He pivoted to the ▸▸

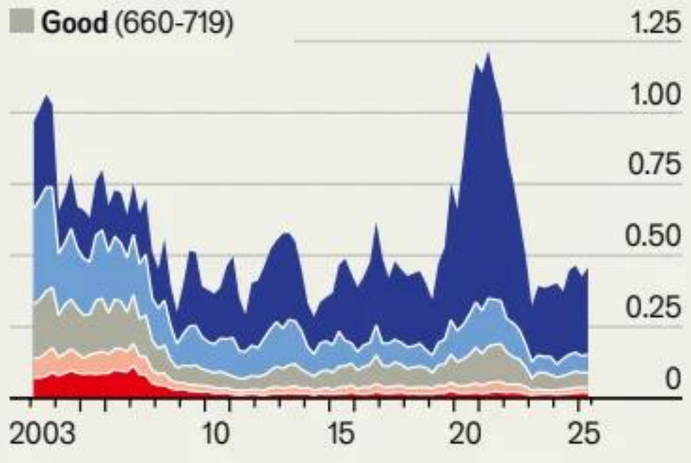
Going downhill 1

United States, mortgage debt

Source: Federal Reserve

Slipping ladder 2

US, mortgage origination by credit score, $trn



Sources: Equifax; Federal Reserve Bank of New York

emerging single-family rental industry, throwing up and renovating homes for tenants rather than buyers. His firm now manages 50,000 such properties, mostly across America's sunbelt. Most of his tenants are people with average or below-average credit scores, who 30 years ago would probably have owned their homes.

The build-to-rent sector is a welcome source of new homes, even if they are not the kinds many American families dream of. But big landlords, too, are becoming a political target. Across the country, state legislators from both sides of the aisle blame them for pushing up prices and rents. The state of New York has banned institutional investors from buying homes during their first 90 days on the market. Senator Jeff Merkley of Oregon wants to impose tax penalties on big investors buying single-family homes nationwide.

Impeding the few developers willing to build new houses by cracking down on the providers of capital threatens to make a simmering crisis boil over. Goldman Sachs, a bank, estimates that the 1.6m privately owned properties completed last year still leave the market short of 3m-4m homes. Unless that gap is plugged fast, any policies meant to make mortgages more widely available will only push house prices higher, nullifying their effect. As his party heads for the midterms, Mr Trump—a former developer terrified of inflation—should brace himself for a combustible new era of property politics. ■

BUTTONWOOD

Unsafe havens

Will gold's scorching rally turn into a rout?

THE JARGON of gold trading echoes that of poker. "Strong hands" are investors loyal to the metal no matter the price. "Weak hands" are flaky punters who fold at the first sign of trouble. Bullish investors win when they convince others of their story about why the price is rising, which boils down to why, this time round, strong hands outnumber weak ones. When the market tanks, their bluff is called.

Until recently the strong hands were winning so comfortably that the argument seemed over. But, since October 20th, when the price hit a record $4,380 an ounce, it has fallen sharply before hovering around $4,100. The bulls are shifting uneasily. The price remains 54% higher than in January and 42% above its previous inflation-adjusted peak, scaled in 1980. Some analysts now expect a gentle rise; others predict gold will break $5,000 next year. But the bears reckon it is just starting to descend. Whose story makes more sense?

Each rests on a different buyer: institutional investors, central banks and speculators. Begin with the institutions. Gold's main attraction is as a store of value, especially in times of crises. It is tangible, easy to transport and tradable on a global market, which reassures investors with big portfolios. Its previous bull runs came after the dotcom crash and the global financial crisis of 2007-09, and during the covid-19 pandemic. But this time is different. The price of gold has roughly doubled since March 2024, in the absence of a recession. America's S&P 500 stockmarket index has risen by almost 30% in the same period; real interest rates remain high.

Perhaps institutional investors are seeking refuge in gold since they fear a crisis is near. This year President Donald Trump's tariffs and his stand-off with China have threatened trade chaos. America has undergone its longest-ever government shutdown. Fears are mounting that an AI-stock crash could bring down the real economy. But it is tricky to reconcile these on-again, off-again shocks with gold's almost linear climb. Mr Trump's trade deals, his truce with China, peace in the Middle East—none has had much impact. Since America's shutdown came to an end on November 12th, stockmarkets and gold have, unusually, appeared to bounce around in tandem.

A second explanation contends that the gold rush is being driven by central banks. According to this "debasement" theory, America's political dysfunction and ballooning public debt, as well as sanctions and threats to the independence of the Fed, are feeding fears of rampant inflation and killing faith in the greenback, causing central banks worldwide to swap long-duration dollar assets for safer gold. But where's the evidence? Were American securities being dumped en masse, the dollar would be falling and long-term yields would be rising. In reality, the dollar has been pretty stable after slumping earlier this year; yields on 30-year Treasuries have been mostly flat.

Proponents of debasement note that emerging-market central banks are keen on the metal. If gold's share in reserves is up, however, that is largely because its price is rising while the dollar is not. In volume terms, emerging-market purchases of gold have risen but remain small. A confidant of central-bank officials detects no urge to bet the farm on the metal, especially if doing so would mean chasing a bubble. IMF data suggest that their reported buying has slowed since last year, and purchases are driven by just a few banks. China's unreported imports, as proxied by British customs data, seemingly peaked before 2025.

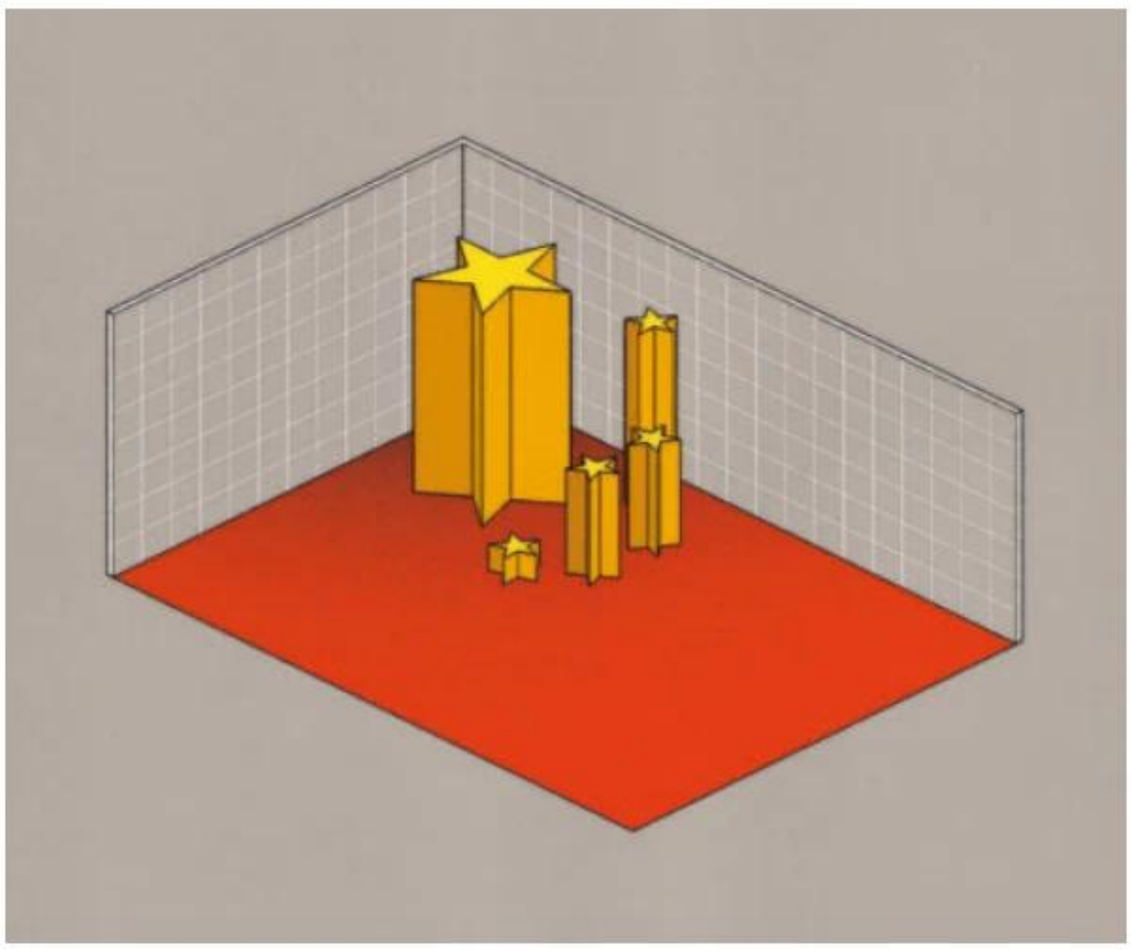
That leaves speculators as the most likely drivers of recent price movements. In late September "long" positions held by hedge funds on gold futures were at a record 200,000 contracts, equivalent to 619 tonnes of metal. Net purchasing by exchange-traded funds was also strong. Last month ETF flows ebbed; that, together with just 100 tonnes' worth of net sales by hedge funds, would explain much of the price dip observed late that month, estimates Michael Haigh of Société Générale, a bank. ETF flows have since rebounded. It would therefore appear that the gold price closely tracks these flighty funds' appetite.

What may have started, months ago, as a limited push for more gold in central banks' reserves then snowballed into a self-propelled mass of hot money chasing prices higher. Now this classic "momentum trade", of investors following trends, has stalled. Should it reverse, the "strong hands" have a large amount of chips at stake.

FREE EXCHANGE

Twenty grand in ten

China has set itself a lofty growth target. But it faces a real problem



THE ISLAND of Aruba, off the coast of Venezuela, has a population of just 108,000. Its economy, once dependent on breeding horses, pivoted into sifting gold then refining oil. Now it relies on attracting tourists to its white beaches, 24-hour casinos and daily games of bingo. An island just 32km long would not seem to have many bragging rights over the world's second-biggest economy. But tiny Aruba has achieved something China's leaders would dearly love to emulate. It more than doubled its GDP per person in less than 15 years. And it accomplished that feat even after reaching the income per person that China has recently attained.

China's leaders like to set ambitious and arbitrary goals for their sprawling economy. Mao Zedong proclaimed in 1957 that its steel output should surpass Britain's in 15 years. Farmers turned their hands to smelting iron in backyard furnaces, with disastrous consequences. Under Deng Xiaoping, China's government aimed to double the size of the economy between 1980 and 1990 and do it again by the end of the 20th century. It met both targets with ease.

The tradition has continued, more tentatively, under Xi Jinping, China's current leader. In 2020 he said it was entirely possible China could double its GDP per person over 15 years. A new guide to the "fourth plenum", a big party meeting held last month, states the country's GDP per person should reach $20,000 by 2035 (measured at the prices and exchange rate prevailing in 2020). That would suffice, it says, to make China a "moderately developed economy". Meeting both goals would require China's GDP per person to grow by about 4.4% a year over the next ten years.

That target may not seem too daunting. Even over the past ten years—which began with a currency crisis, ended with a trade war, and featured a pandemic in between—Chinese growth has exceeded 5% per person on average. But as countries get richer, their growth tends to slow. China's GDP now exceeds $13,000 per person (in 2020 prices). Few countries have grown as fast as China's leaders now envisage after reaching that level of prosperity.

Aruba is one example of this rare breed. Its GDP, divided among its modest population, crossed the $13,000 threshold in 1983. Two years later, its oil refinery shut down. But Aruba still boomed in the late 1980s after tourism took off. From 1983 to 1993, its GDP per person grew by more than 8% a year on average.

How many other Arubas are out there? One place to look is the Penn World Table, which provides GDP and population figures for 185 economies from 1950 to 2023. Some countries, like America, enter the database with a GDP per person already far higher than $13,000 (converted into 2020 prices and market exchange rates using IMF data). Other economies have never met this threshold or reached it only recently. There are, however, 43 economies in the data that can provide a useful benchmark for China. They all reached a GDP per person of around $13,000 at some point after 1950 but before 2014.

Averaged together, these economies grew by 3% a year per person in the decade after reaching China's current prosperity level. Only ten of them managed to grow faster than 4.4% a year. In addition to Aruba, they include Macau (another gambling paradise), Japan and the four original Asian tigers—Hong Kong, Singapore, South Korea and Taiwan. France and Italy reached the $13,000 threshold in the 1960s and grew at a tigerish rate in the next ten years. The last of the ten is Israel, a miracle economy of a different sort. Its GDP per person managed to grow by 4.4% a year on average from 1964 to 1974 despite several wars with its neighbours.

China's 2035 goals are, then, ambitious. It is aiming for the top quarter of historical growth spells among comparably rich economies. And unlike its forerunners, its population is huge. A rapid rise in its GDP per person will translate into even greater economic heft. That will have implications for the global pecking order.

The plenum guidebook assumes that China's population will shrink by 0.2% a year over the next decade. If that holds true and if China's GDP per person grows as planned, its aggregate GDP will expand by 50% by 2035. China's colossal economy will be half as big again as it is today. That is a much greater increase than anyone predicts for America over the period. All else equal, it could bring China's economy close to beating America's in total size.

However not all else is equal. The most obvious things that will change are prices and exchange rates. China's leaders tend to set their goals in "real", inflation-adjusted terms. That is true of their aims for 2035 and their annual growth targets for the year ahead. But the real world is nominal, as Matthew Yglesias, a blogger, once said. And in the real world, China's prices have been falling for two and a half years, according to the broadest measure.

Moderately deflated

Due to this deflation, China's nominal growth, before adjusting for inflation, has lagged behind America's in recent years, even though its real growth has been faster. At the same time, its currency, the yuan, has wobbled. Thus when China's current-price GDP is converted into dollars at the going exchange rate, it has lost ground to America's, falling from over 70% of America's in 2020 to only 64% last year. China's leaders are free to set their long-term targets in terms of the prices and exchange rates that prevailed in 2020. But those are not the prices or rates anyone is paying today.

China can become a "moderately developed" economy by its own idiosyncratic definition without tackling this problem. But if it wants to become the biggest economy in the world, it will have to do more to expand demand, reverse deflation and maintain the value of the yuan. In these efforts, it would be better served by a different kind of long-term target. Instead of seeking to double GDP per person over 15 years in "real" terms, it should seek to triple it in the nominal dollar terms that really matter. ■

THE WORLD AHEAD 2026

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Celebrating its 40th year, our future-gazing guide looks beyond today's headlines to the forces shaping 2026—from global conflicts and economic uncertainty to AI's impact on jobs.

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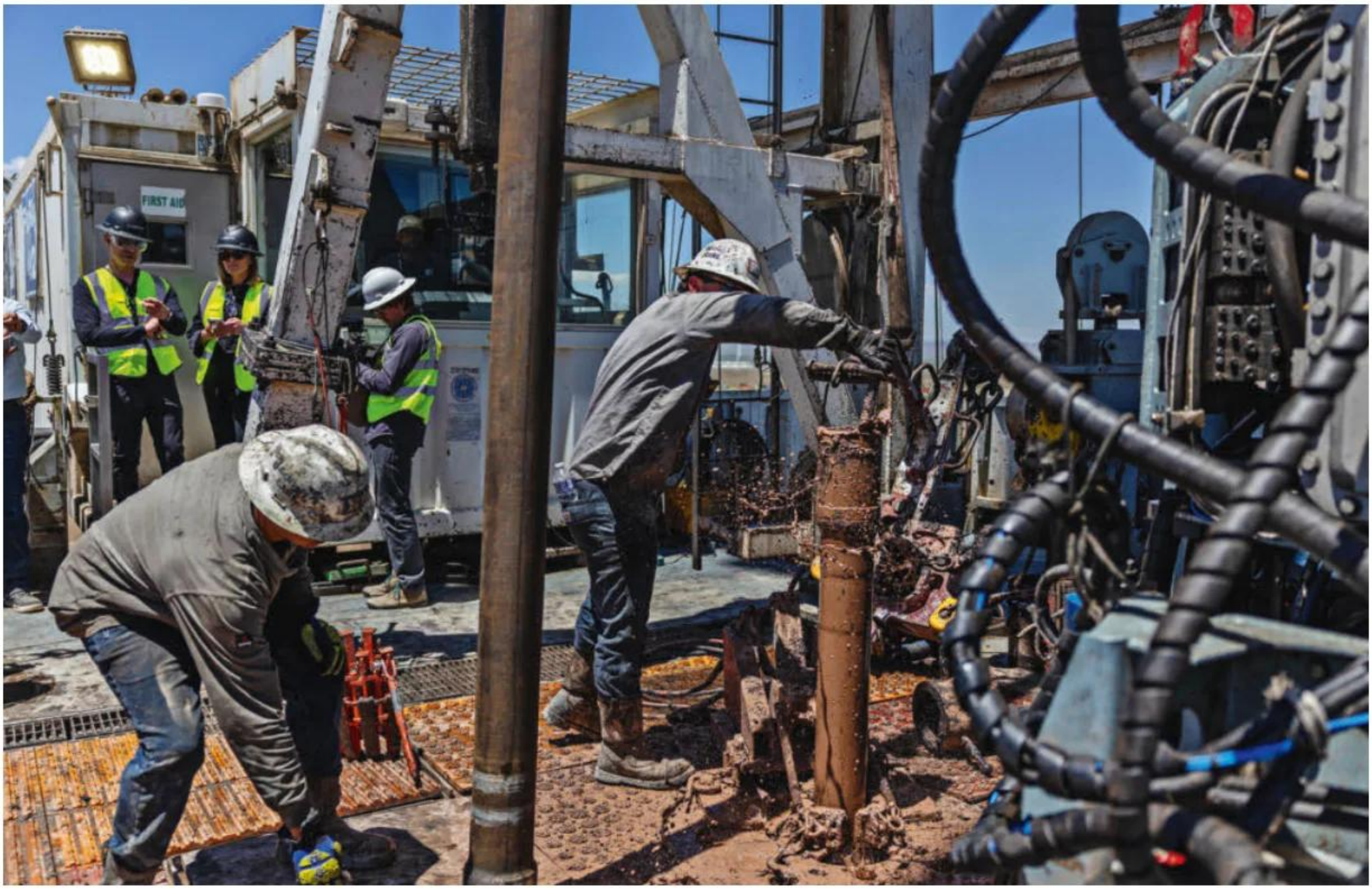
Science & technology



Geothermal energy

It's gettin' hot in here

MARBLE FALLS AND MILFORD

A wave of new technologies could transform a neglected source of energy into something bigger than nuclear

THE FUTURE of clean energy is unfolding on a desert plateau about four hours north-east of Las Vegas. Dotted around the spectacular sands near Milford, Utah, are nearly two dozen wells, each reaching deep into the Earth where the rocks are permanently hot.

Standing atop one of the electrified rigs that drilled those wells, Jack Norbeck has to shout to make himself heard over the fierce winds. "Ten rigs that are identical to the one that you see sitting here in front of us", he says, "could produce a gigawatt of new output per year." That is as much as a typical nuclear reactor, enough to power a million homes. Mr Norbeck says that his firm, Fervo, has "acquired over half a million acres of geothermal mineral rights across the US, which we see as over 50 gigawatts of opportunity".

Fervo is a buzzy geothermal-technology startup backed by Google and other high-powered tech investors that wants to turn a once-neglected source of energy into a powerhouse. The privately held firm, valued at some $1.4bn, will start producing electricity next year in the first phase of a 500-megawatt deal with the power division of Shell, an oil company, and with a Californian utility. That is the largest commercial contract agreed for geothermal electricity in the industry's history.

It is the first shot in an incipient geothermal revolution. Today, less than 1% of global (and American) energy comes from geothermal. But researchers at Princeton University predict that technical innovations mean widely available geothermal power could, by 2050, produce nearly triple the current output of the country's nuclear power plants (which supply roughly 20% of America's electricity at present). By 2035, the International Energy Agency reckons cumulative investment in geothermal globally could reach $1trn, a big jump from the $1bn to $2bn invested in 2024.

The optimism is a combination of market pull and technology push, says Milo McBride of the Carnegie Endowment for International Peace, a think-tank. Because geothermal can offer clean energy around the clock, it is a perfect match for the incessant power-guzzling of data centres. That explains why Google, Meta and other purveyors of artificial intelligence keen on carbon-free but "firm" power are supporting geothermal innovations.

Geothermal's environmental credentials are stellar. Like wind and solar, it emits virtually no greenhouse gases during its operations. And, because Earth's deep rocks are hot all the time, geothermal can ▸▸

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75 Well informed: Women's testosterone

provide reliable electricity around the clock, unlike the other intermittent renewable sources of energy. It can also provide clean heat and serve as grid-scale energy storage (see next story).

In the past geothermal was used in the relatively few locations globally where temperatures of 150°C to 200°C and permeable fractures happen to occur within 4km of the surface. Firms drilled vertically and used the steam that rose to turn turbines to make power. The next generation of geothermal will take a more sophisticated approach (see graphic). Enhanced geothermal systems (EGS) and closed-loop systems (CLS) both rely on tapping hot impermeable rock, which is much more common than the confluence of permeable fractures and heat needed for old-fashioned geothermal. Typically they will reach depths of less than 4km and temperatures of 150°C to 200°C. In the longer term, the future could belong to "superhot" geothermal, which aims to penetrate 8km to 20km to reach temperatures approaching 400°C.

Unlike conventional geothermal, EGS projects are able to extract energy even when there are no natural fractures in the rock. This is thanks to the hydraulic fracturing ("fracking") and multilateral drilling technology developed in the early 2000s by the shale-oil industry. Fervo's engineers first drill a deep well vertically down and then rotate their bit and move it horizontally. Some distance away, they drill a second well, parallel to the original.

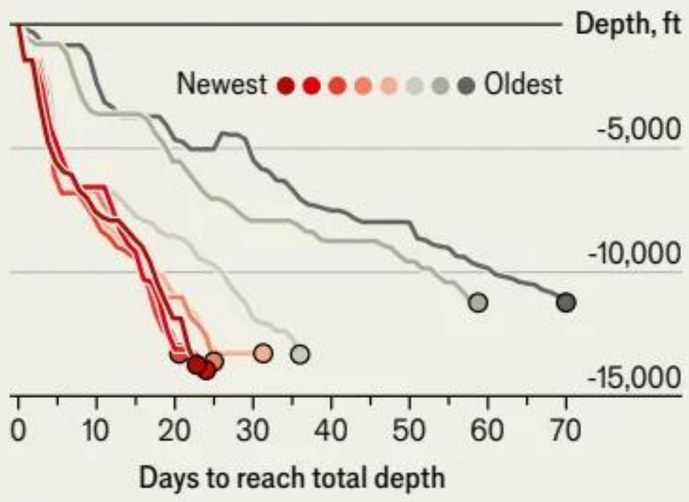
Crucially, the two wells do not touch. Rather, fractures are created in the rock between them to create an artificial reservoir. Water is then pumped from the surface down the first well, which travels through the fractures and gets heated in the process. The hot water returns to the surface through the mirror-image well and warms another fluid, which ultimately turns a turbine to produce electricity.

A paper published in *Nature Reviews Clean Technology* in January by Roland Horne of Stanford University examined the rapid technical progress of the next-generation geothermal industry (see chart). Fervo has demonstrated a 70% year-on-year reduction in drilling times, which translates directly into much lower costs. Professor Horne reckoned that the power costs of EGS will be competitive with rival energy sources by 2027.

With CLS systems, engineers most commonly use pipes that circulate a working fluid inside an enclosed semi-circular system. The fluid flows down one side, gets heated at depth and returns via the other side. A plus is that this system will work in arid regions. But because it needs more piping and drilling, CLS is more complex and costly. Despite the challenges, firms are making progress with CLS in regions where EGS is not an option because fracking is banned or water is scarce.

Drill, baby, drill

Fervo Energy, drilling performance using enhanced geothermal, Mar 2022-Jan 2024



Source: Fervo Energy

In Germany, Canada's Eavor drilled two vertical wells 4.5km to 5km deep and linked them with a dozen horizontal wells, each 3km long, to create its "radiator" underground. In October it announced that drilling the first eight of its 12 lateral wells took over 100 days and millions of dollars, but drilling times dropped by half for the remaining four. It plans to generate its first commercial power later this year and hopes to produce over 8MW of electricity and 64MW of district heating for nearby villages within a few years.

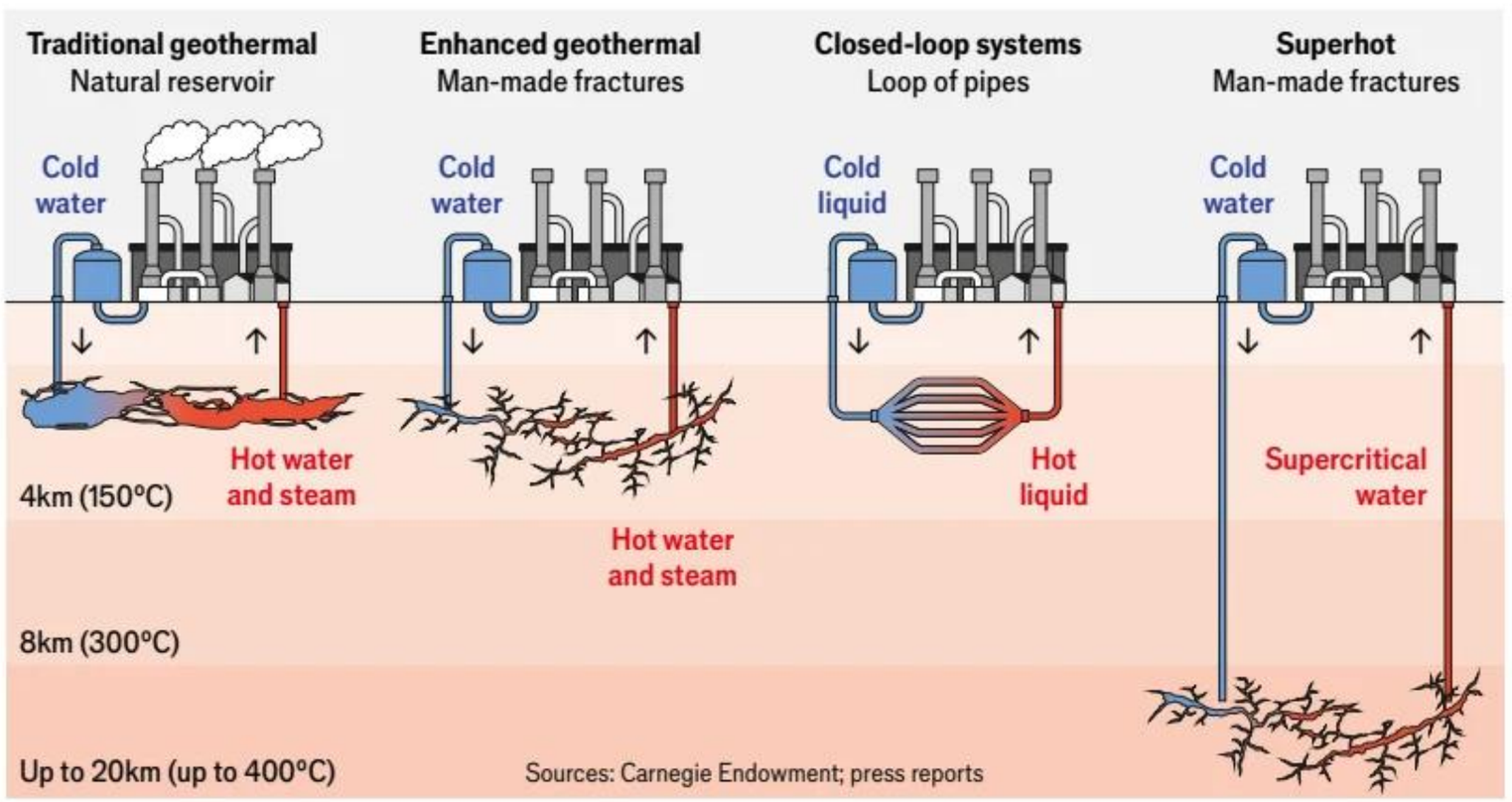
Stepping stones to superhot

EGS and CLS will expand the utility of geothermal energy in the medium term, but the industry has even greater ambitions. "Superhot rock geothermal energy could unlock terawatts of clean, firm power globally," says Terra Rogers of the Clean Air Task Force (CATF), an American green group, "with a land footprint far smaller than other energy sources." Beyond 8km deep, where the pressure is more than 200 times that at Earth's surface, water enters a supercritical state (neither liquid nor gas) if the temperature is also above 374°C. Supercritical water penetrates fractures easily and yields five to ten times as much energy per well compared with wells using normal hot water. Modelling by CATF suggests that 13% of North America's land has superhot potential below 12.5km, and tapping a mere 1% could provide 7.5 terawatts of energy capacity.

Alas, previous attempts to harness superhot rock in Iceland, where supercritical fluids fortuitously lurk just 2km to 3km underground, ran into difficulties. High temperatures and pressures, as well as corrosive chemicals, damage well casings and drilling tools and the rig itself frequently gets stuck at depth. Despite these challenges, governments in Iceland and New Zealand have remained keen.

Upstarts are inventing novel equipment to help. At a dusty quarry in Marble Falls, a hardscrabble patch outside Austin, Quaise, a Texan firm, has developed a millimetre-wave energy beam (akin to a laser) that can penetrate the hardest rock. This beam recently drilled a 118-metre-deep hole into granite, turning rock into ash as it advanced down. It did so at up to five metres per hour, far zippier than the 0.1 metres per hour that oil-industry kit is expected to manage at superhot temperatures. Quaise aims to drill a kilometre-deep well by next year and to develop complete rigs to show that the idea can work at scale.

Mazama, a Texas-based startup, said in October that it had completed a pilot project at a site in Oregon. Its engineers drilled wells and stimulated fractures through difficult rock at a record temperature of 330°C and 3km deep, all with no breakage of kit or "downhole failures" of motors or sensors. Mazama reckons this location can produce 15MW from next year, scaling eventually to 200MW. Professor Horne notes that 330°C is a bit short of supercritical but is nevertheless very hot and very promising. Recent progress, he reckons, suggests it may take only a few years for Mazama to get superhot technology to where Fervo was with EGS in 2023: "A lot has changed the past two years," he says. "And things are moving fast." ■



Sources: Carnegie Endowment; press reports

Energy storage

Better than batteries

CHRISTINE, TEXAS

Geothermal kit can help make the power grid more flexible

IF YOU DO not mind chance encounters with alligators and feral hogs, the trip down the long gravelly track off a local road in Christine, Texas, is worth making. On a clearing in the bushes a firm based in nearby San Antonio with a deal to supply power to Meta's data centres has built one of the world's most intriguing batteries. The project has already demonstrated its ability to store and release 3MW of power to the Texas grid and is set for further expansion.

Most of the world's grid-scale energy storage comes in the form of pumped hydropower. Such systems consist of two reservoirs, one on higher ground than the other. Water is pumped up when electricity is cheap and is released down, when needed, to turn turbines that make electrical power to feed back to the grid. These systems are expensive, slow to build and take up a lot of land.

SAGE Geosystems, a Texan enhanced geothermal systems (EGS) startup, has worked out a clever way to harness mechanical pressure to create a big underground storage system with several times the energy density of those pumped hydro plants. "It's pretty much pumped hydro upside down," explains Cindy Taff, SAGE's chief executive and a former drilling boss at Shell (pictured).

The firm has drilled about 3km deep, and fractured the rock to create an underground reservoir. Through a drilled well, water is siphoned from a pool at the surface and stored under high pressure underground. When power is required the well is opened back up and, thanks to the rock's natural inclination to close the fracture, the pressurised water moves to the surface. There it can turn a turbine to make electricity.

This "lung", as the firm calls it, can store power for much longer than the lithium batteries that are often seen as the future of grid-scale storage. Because SAGE's main hardware costs are fixed, unlike with battery blocks which are additive, the cost per unit of stored energy goes down the longer the system is designed to run. By making electricity generation flexible, this kind of kit could even double the value of the power it stores, say, by storing solar power made at a time of plenty and selling it later at a period of scarcity for a higher price.

SAGE is not alone. Other EGS firms have also demonstrated the ability to produce flexibly, though none are pursuing it with as much imagination or vigour. HYSTORE, a European consortium involving utilities and research organisations, is exploring large scale underground thermal-energy storage in aquifers. Other researchers are looking at using boreholes. What the Texan pioneers have demonstrated, though, is that turning an old-fashioned idea on its head can produce pleasing results.

Astrobiology

Is it life?

How to spot signs of ancient biology

IDENTIFYING SIGNS of life in ancient rocks is hard. It is not enough to find organic molecules—rocks of all sorts contain them but "organic" just means the molecules contain chains of carbon atoms. Some meteorites are stuffed with organic molecules that have no biological antecedents; industrial laboratories on Earth routinely make organic molecules that nature has never produced.

Painstakingly analysing the carbon-bearing molecules in a sample can sometimes show that they are derived from something distinctively biological. But this approach has never worked on anything older than 1.6bn years old. Beyond that, scientists judge things according to the ratio of carbon isotopes in the sample (living things tend to prefer the lighter isotope) and also whether the material contains the kinds of structures that usually make scientists think of microbes. But neither technique is infallible.

A new approach, described this week in the *Proceedings of the National Academy of Sciences*, has successfully applied machine learning to the problem. It is a technique that could not only help better identify ancient life on Earth, but could also be used to hunt for life in samples from Mars and farther afield. Instead of analysing rocks molecule by molecule, the new technique blasts samples into fragments and displays data on the frequencies and masses of the molecules within on a two dimensional grid. The output looks something like a mountain range—a pattern of peaks of various shapes. Each sample's landscape is unique; but some share common features.

The researchers, led by Michael Wong, an astrobiologist, and Anirudh Prabhu, a machine-learning specialist, both at Carnegie Science (as the Carnegie Institution for Science now styles itself), trained a machine-learning algorithm to look for common themes in the landscapes from samples from living things, fossils, meteorites and industrial processes.

They built four models through which it could distinguish things with biological antecedents from things which lacked them. The oldest sample they identified as biological was 3.3bn years old—twice the age of the oldest sample to have been ruled biological by molecular means.

The next step, for which NASA is providing funding, is to develop a bigger training set that features a wider range of sam- ▸▸

ples, including more fungi, more fossil animals and more samples that have been subjected to serious heat and pressure. That should allow the models to discriminate better—and prepare them for use on samples from other planets.

Unfortunately, the samples of most interest are stuck on Mars. The organic material gathered by NASA's *Perseverance* rover is currently sitting on the surface of the planet they came from, as the agency lacks the nous and budget to get them home. But future missions could take a version of the new system along with them to analyse samples *in situ*. The organic material seen in the geysers of one of Saturn's moons, Enceladus, would be an attractive target.

And there is another possibility. Living things, and their components, have functions; some of the scientists on the team, including Dr Wong, think this may be a fundamental way of distinguishing them from other stuff. It is possible that the landscapes which prove dispositive of life might turn out to share some other common property reflecting their origin in sets of molecules with specific functions, rather than one flung together by chance. If that is the case, a test for life might also be an insight into what makes it so special. ■

Musical bows

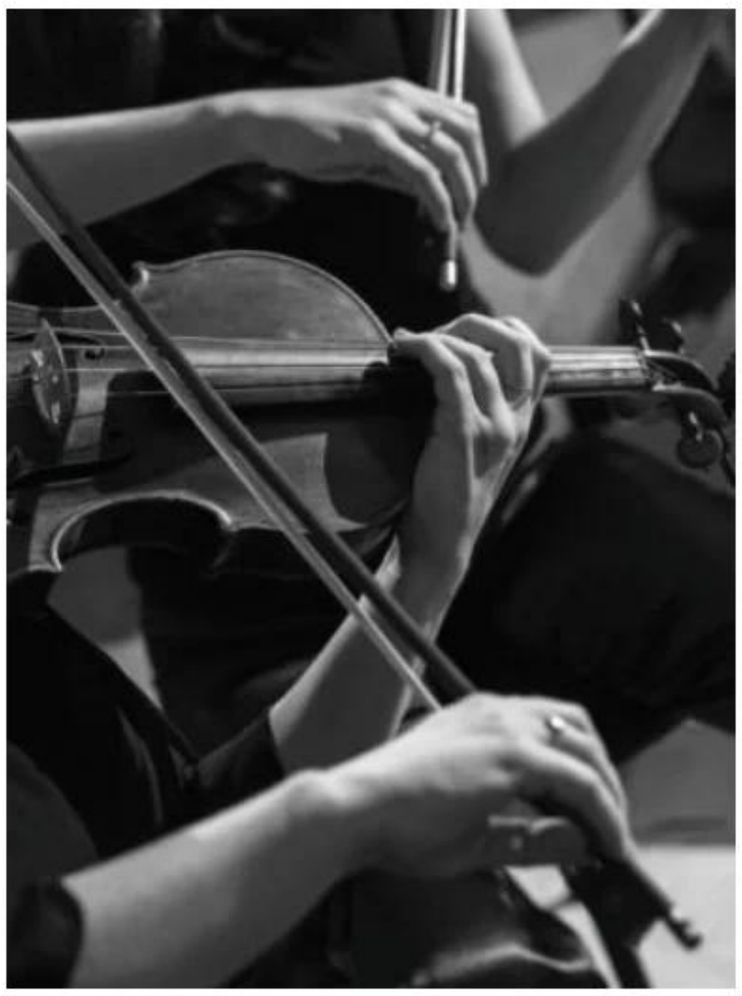
Conservation v concertising

The fate of a rare wood has musicians at odds with environmentalists

IN 2017 A FRENCH auctioneer sold a 200-year-old violin bow made by François Xavier Tourte, regarded as the Antonio Stradivari of bow-making, for a record €576,000 ($687,000). Tourte was among the first to make consistent use of a raw material that is still prized today for the best bows: pernambuco, or brazilwood. A modern orchestra is a thicket of dancing brazilwood sticks.

And that's a problem. Logging, urban sprawl and ranching have shrunk Brazil's Atlantic forest, the tree's habitat, to an eighth of its former area. The number of wild trees has dropped by four-fifths in less than a century. CITES, an international agreement, has restricted trade in brazilwood products since 2007.

But Brazil's government wants CITES to list the trees among the most endangered species, giving them the highest protection; a CITES meeting in Samarkand that starts on November 24th will decide whether to do so. The proposal has spooked practitioners of Tourte's craft and the musicians who depend on it.



Play me an arpeggio in D minor

Lovers of art and nature are often soulmates, but brazilwood is splitting them apart. The bows have "this perfect mix of qualities", producing a "very ringing sound, with a large spectrum of overtones", says Christopher Graves, who makes them in London. *Archetiers* have found substitutes for other materials—ivory from helpfully extinct mammoths to replace banned elephant ivory at the tip of a bow, for example—but nothing that matches strong, springy brazilwood. Besides, *archetiers* use small amounts—perhaps one tree's worth of wood over an entire career. Most of it, they say, left Brazil years ago.

The protection upgrade Brazil wants would make life difficult for them and for musicians. Any bow, even one of Tourte's, would require a certificate to cross borders. Environmentalists say that the bureaucratic burden is a price worth paying to save the tree that gave Brazil its name, has fragrant golden flowers and exudes "a red sap when injured", as Brazil's submission to CITES puts it. Loggers are still felling brazilwood trees illegally to supply the bow-making industry, Brazil's environmental agency claims. "Operation Do-Re-Mi", started in 2018, uncovered a wood-laundering scheme that used old documents to hide the origin of newly felled trees.

It should be possible to save both brazilwood and bows. Around 3m trees have been planted since the early 1970s, some with the help of bow-makers. Some of these could be harvested after 30-40 years of growth to make bows as the existing stocks of brazilwood run out. Wild trees need better protection, and governments and musicians can do better at registering existing stocks of brazilwood and keeping track of bows. If that can happen, there is a chance to save a remarkable tree without silencing the music. ■

Gene editing

Taboo? What taboo?

Billionaires want to edit human embryos

MOST STORIES about gene-edited children begin with He Jiankui, a rogue Chinese scientist who, in 2018, announced that he had created the world's first such babies in secret. His reckless and illegal act may soon fade into the background, though, as new efforts to create gene-edited babies take off, this time promoted and funded by the billionaires of Silicon Valley.

At the end of October a website appeared announcing Preventive, an American startup dedicated to altering human embryos using CRISPR, a gene-editing tool. In a post on X Lucas Harrington, the company's founder, claimed to have raised $30m for the venture, which eventually turned out to have been sourced from America's tech elite, including Brian Armstrong, head of Coinbase, a cryptocurrency exchange, and Oliver Mulherin, an Australian software engineer and the husband of Sam Altman, boss of OpenAI.

On the company's website, Dr Harrington says Preventive will at first focus on research to establish whether embryo editing is safe to do in humans, ultimately with the goal of preventing severe genetic diseases. It is not the only company in this area. Another is Manhattan Genomics, co-led by Cathy Tie, a serial biotech entrepreneur who was briefly in a relationship with Dr He. Yet another that has teased the idea is Bootstrap Bio, based in California. Though editing humans is one of the most controversial pursuits in medicine, the rise of these companies (and their rich, high-profile backers) reflects a countervailing belief: that the capability to edit embryos creates an obligation to use it.

CRISPR gene-editing technology lets scientists make precise changes to an organism's DNA. Invented in 2012 by Jennifer Doudna and Emmanuelle Charpentier, biochemists who went on to win the Nobel prize in chemistry in 2020, the tool has transformed biology. Therapies are also starting to appear—Casgevy, the first licensed gene-editing treatment, cures people of sickle-cell disease.

These treatments have their challenges, however. Getting the therapy into the right part of the body is difficult. Casgevy requires a patient's bone-marrow stem cells to be collected, sent to a lab for editing, and then transplanted back. It is gruelling and expensive. Vertex Pharmaceuticals and CRISPR Therapeutics, the drug's makers, currently charge around $2m per dose. ▸▸

In principle, editing an embryo could make things cheaper and also overcome some of those delivery problems. Deploying CRISPR to fix a genetic problem in a single-celled embryo, or even egg or sperm cells, should be relatively easy. And as the embryo grows, any genetic fixes will spread into the new tissues that are created. Dr Harrington estimates that it will reduce costs to $5,000 per embryo and, if the process is deemed safe, couples with genetic diseases might thus have the option of having their own children without fear of passing on their conditions.

That's a big "if". To work, CRISPR first breaks the DNA double helix in order for the cell to subsequently fix it. How well the repairs work in human embryos, however, is unclear—breaks might be left unmended or the ends of the DNA helix may pair up in unusual ways, causing new mutations. Many genes are also not understood well enough for scientists to guarantee that an edit meant to lower the risk of one disease does not inadvertently increase the risk of another. Edits made in embryos would also make it into the resulting person's sperm or egg cells, which means the original edit would be passed on to future generations, with unpredictable consequences.

And then, of course, there is the question of designer babies. Dr Harrington has said that Preventive will focus on severe disease. Yet it is only a small leap from fixing a genetic mutation to engineering protective gene variants against cancer or dementia. Ultimately, some companies may promise edits aimed at a person's appearance or intelligence.

Dr Harrington—a former student of Professor Doudna's—says that the company will not attempt human trials if safety is found wanting. In any case it would be illegal for the Food and Drug Administration, America's medical regulator, to consider applications for trials of embryo editing. Media reports have suggested that the United Arab Emirates is being considered as an alternative venue but Dr Harrington says it is "premature to consider any jurisdiction for clinical use" and that all the company's work is based in America.

With the exception of Dr He, scientists have largely opposed the practice of editing human embryos. But that resistance might not hold for ever, suggests Robin Lovell-Badge, a developmental biologist at the Francis Crick Institute in London. The improved safety and efficiency of base editing, for example, which is a newer version of CRISPR that does not fully break the DNA helix, looks promising. Nevertheless, Professor Lovell-Badge is concerned by the interest from Silicon Valley. "People in the tech industry have often adopted this [attitude of], 'let's do it, and if it breaks, it doesn't matter'," he says. "Well, you can't do that with humans." ■

Well informed

Should women take testosterone?

It can be helpful in some cases, but it's no fountain of youth

OF THE MANY health trends on social media, female demand for testosterone as a performance-enhancing drug is one of the strangest. It is a "powerhouse hormone", proclaims one influencer, who goes on to recommend it for "energy, mood, muscle tone, libido and overall vitality". Some women even have slow-dissolving testosterone pellets injected into their buttocks.

Although commonly thought of as a "male" hormone, testosterone is essential for women too—it contributes to libido, sexual arousal and orgasm by increasing dopamine levels in the central nervous system. Since the 1940s doctors had been prescribing the hormone to their female patients to address problems such as low libido. But this ended when a scare around hormone-replacement therapy (HRT) emerged at the turn of the millennium. Although the concern centred on oestrogen and progesterone, testosterone also got caught up in the mix. Doctors became worried about a shortage of evidence-based research to support its use.

As concerns about the use of HRT have fallen away, however, women have started reconsidering testosterone, says Caroline Messer, a doctor at Fifth Avenue Endocrinology, a clinic in New York. Since 2019 the hormone has been offered for low libido, now called hypoactive sexual desire disorder (HSDD). In America, between 2013 and 2023, prescriptions increased by almost 50%; in Britain they rose ten-fold between 2015 and 2022.

Testosterone peaks in a woman's 20s; by menopause, blood levels are about a quarter of that peak. The goal of therapy for HSDD is to get women roughly to their pre-menopausal levels, using products applied to the skin. Dr Messer avoids injectable pellets—she says that women can get too much testosterone this way. Too much hormone comes with side-effects including acne, unwanted body hair, mood swings or a permanent deepening of the voice.

Testosterone may also be useful during menopause for reasons other than sexual dysfunction. Women in menopause frequently complain of "brain fog"—with symptoms including fatigue, difficulty concentrating, poor memory, reduced verbal fluency and reduced ability to multitask. Enone McKenzie, a consultant psychiatrist specialising in women's hormonal mental health at The Soke, a clinic in London, says peri-menopausal women who have been prescribed testosterone for low libido report improvements in mood and say they remember things better and have less decision fatigue. A few studies also suggest improvements in mood and cognition in post-menopausal women treated with testosterone.

However, there is no good evidence from well designed trials for the long-term efficacy and safety of testosterone used this way. That leaves such therapies in a medical grey area. For younger women who have no medical need for testosterone, its use to improve mood or performance is therefore *terra incognita*. The use of high doses for muscle-building or performance, equivalent to the way male bodybuilders might use the hormone, is deemed unsafe by experts.

For women with medical needs, testosterone supplements, at sensible doses, can be invaluable. But for everyone else, says Dr Messer, this is another "hormone du jour" needlessly offered up by influencers on social media.

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Culture

The best books of 2025

Bound to please

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Gladiators and dictators, wolves and Beatles feature in our list this year

Biography and memoir

Buckley. *By Sam Tanenhaus.*
A superb biography of William F. Buckley, the most influential American journalist of the 20th century. For this book, more than a quarter of a century in the making, Sam Tanenhaus has judiciously curated the public and private record.

Careless People.
By Sarah Wynn-Williams.
A cracking corporate kiss-and-tell. Marketed as "the book Meta doesn't want you to read", this memoir portrays Mark Zuckerberg, the company's founder and boss, as aloof and superficial.

Dark Renaissance.
By Stephen Greenblatt.
Shoemaker's son, scholar, playwright, spy: the outline of Christopher Marlowe's life is dramatic. But the details—not least the reason for his fatal stabbing in 1593, aged 29—are sketchy. This evocative book offers a portrait of Elizabethan England: a time of paranoia, surveillance and violence, but also blistering creativity.

Electric Spark. *By Frances Wilson.*
This brilliant book grapples with Muriel Spark, the author of "The Prime of Miss Jean Brodie", "The Ballad of Peckham Rye" and 20 other novels. Her life is characterised by the same strange, stark abruptness as her prose.

How to End a Story. *By Helen Garner.*
An Australian novelist brings together 20 years of her diaries, in which she reflects on motherhood, her writing career and a disastrous marriage to a fellow novelist. Her prose is by turns dazzling, poignant and very, very funny; there is a delightful observation on every page.

Mother Mary Comes To Me.
By Arundhati Roy.
Where does Arundhati Roy, a Booker-prizewinning author and activist, get her fiercely independent streak? The clue is in the title. In this sparkling memoir Ms Roy explores her difficult relationship with her mother, who was a "dreamer, warrior, teacher"—and a terror.

Raising Hare. *By Chloe Dalton.*
In this tale, joy and wonder come bundled in a four-legged, long-eared, skittish little package. Caring for the leveret opens the author's eyes to the natural world; she is an elegant writer and sharp-eyed observer.

Storyteller. *By Leo Damrosch.*
With his wonderfully crafted books and mercurial, magnetic personality, Robert Louis Stevenson always inspired devotion. This meticulously researched biography avoids idolatry: it tells the reader not just what happens in Stevenson's books, but why they should care.

Zbig. *By Edward Luce.*
Was Zbigniew Brzezinski America's most important foreign-policy guru? A fine biography makes a powerful case for an underappreciated man with a penetrating intelligence and remarkable foresight.

Business and economics

1929. *By Andrew Ross Sorkin.*
The story of the seminal stockmarket and banking crash of modern history. The author wisely tells this sprawling story in a focused way, reconstructing how crucial figures experienced the ructions almost hour by hour.

Chokepoints. *By Edward Fishman.*
A riveting world tour of American sanctions. This book shows how economic weapons evolved through trial, error and political pressure, as Western officials were often too afraid of using them. It is also a ripping yarn.

The Corporation in the 21st Century. *By John Kay.*
The framework for thinking about business and capitalism is hopelessly outdated, argues one of Britain's leading economists. This book offers a lively, lucid discussion of what companies are, and what they are for.

House of Huawei. *By Eva Dou.*
Huawei has gone from making basic telephone switches nearly 40 years ago to designing some of the world's most advanced semiconductors today. A reporter at the *Washington Post* tells the story of one of the world's most controversial companies.

The Thinking Machine. *By Stephen Witt.*
An excellent biography of Jensen Huang, co-founder and CEO of Nvidia. Stephen Witt weaves together the story of the man, his company and the computer science that led to large language models such as ChatGPT, which brought generative AI to the masses in 2022.

Culture and the arts

Fatherhood. *By Augustine Sedgewick.*
An American scholar describes how thinking about dads has changed over time. What is striking is the sheer variety of nonsense that people have believed; another common theme is cruelty. The best time to be a father may be now.

The Genius Myth. *By Helen Lewis.*
Books about geniuses tend to fall into predictable categories, from hagiography to takedowns to how-to manuals. This book is more original. This is the high age of the genius, readers may conclude—but not in a good way.

John & Paul. *By Ian Leslie.*
The Beatles have been amply covered. But this book, which focuses on the relationship between John Lennon and Sir Paul McCartney, offers new insights. Ian Leslie listens as a musician, a fan and a literary critic.

Lone Wolf. *By Adam Weymouth.*
In 2011 Slavc, a wolf, set off from Slovenia and travelled 2,000 kilometres in search of a mate. For this original, lyrical travelogue, the author follows in his pawprints and reflects on rural life, migration and folklore. The wolf, it turns out, embodies many of Europe's divides.

Why Q needs U. *By Danny Bate.*
This book offers a history of writing, a biography of English and an introduction to linguistics, all smuggled into 26 short and entertaining chapters. It is perfect for anyone who is baffled or enchanted by the eccentricities of the English language.

Fiction

Archipelago of the Sun. *By Tawada Yoko. Translated by Margaret Mitsutani.*
The final volume in an acclaimed trilogy, which follows a travelling band of eclectic multilingual friends. The author's style is somehow both delightfully dreamlike and cuttingly sharp.

The Eleventh Hour. *By Salman Rushdie.*
A luminous collection of short stories, which slyly mock a wide range of targets: religious bigots, political charlatans—and death itself.

Flashlight. *By Susan Choi.*
While visiting Japan, ten-year-old Louisa and her father go for a walk on the beach. The next day she is found half-dead and her dad has vanished. A novel about identity and history that is full of twists.

Flesh. *By David Szalay.*
The winner of this year's Booker prize is a deceptively complex novel which finds original ways to explore masculinity, intimacy, class and power struggles. The author's elegant, stripped-back prose powers a narrative rich in pathos.

The Lack of Light. *By Nino Haratischwili. Translated by Charlotte Collins and Ruth Martin.*
This immersive epic follows the lives of four female friends—Nene, Dina, Ira and Keto—as they navigate the tumultuous years before and after Georgia's independence from the Soviet Union. A tale of resilience and redemption.

The Loneliness of Sonia and Sunny. *By Kiran Desai.*
Sonia is an aspiring novelist in Vermont; Sunny is a journalist in New York. They meet and fall in love, but the question is whether they are able to stay together, find happiness and feel "life growing bigger". This book is grand in sweep yet satisfyingly intimate.

Once the Deed Is Done. *By Rachel Seiffert.*
A novel about trust and trauma. Set in Germany in 1945, this book looks at what happened to the millions of labourers brought in to prop up the Nazi regime. Its characters include a Red Cross worker, herself an exile, and a local child who cracks under the weight of secrets.

Perfection. *By Vincenzo Latronico. Translated by Sophie Hughes.*
A lucid and bitter portrait of millennial dreams and disillusionment. It traces the lives of Anna and Tom, a couple whose picture-perfect Instagram existence begins to crumble.

Vulture. *By Phoebe Greenwood.*
This scathing send-up of war reporting follows Sara, a young English freelance reporter, as she covers conflict in Gaza in 2012. A supremely accomplished debut novel full of wit and bite.

We Do Not Part. *By Han Kang. Translated by e. yaewon and Paige Morris.*
The Nobel-prizewinning novelist chronicles shameful episodes in South Korea's history. The power of this narrative comes from Han Kang's masterful fusion of the literary and the documentary.

What We Can Know. *By Ian McEwan.*
In the year 2119 an academic trawls through archives to track down a lost poem. His discovery yields an account of passion, murder and guilt. This is an inventive, exquisitely written book, which combines dystopia, romance and mystery.

Wild Dark Shore.
By Charlotte McConaghy.
Dominic Salt lives on Shearwater, a fictional island near Antarctica, where he tends to a seed bank which is vital for food security. This taut thriller about battles for survival is enriched by its nature writing and treatment of climate change.

Food

Caribe. *By Keshia Sakarah.*
A British food writer of Montserratian and Barbudan heritage explores the culinary culture of the Caribbean. This book takes each island in turn, looking at its colonial history and how this shaped its food, from Barbados's pudding and souse to Dominica's saltfish fritters.

Chesnok. *By Polina Chesnakova.*
A personal tour through Soviet diaspora cooking. The author was born in Ukraine to a Russian mother and Armenian father who married in Georgia; she explores the cuisine of all four countries and more. This is one of those rare cookbooks that is as much fun to read as cook from.

The Complete Illustrated Guide to Japanese Cooking. *By Harada Sachiyo.*
An introduction to perhaps the world's most sophisticated cuisine. Each technique or ingredient is explained through infographics; recipes include step-by-step photographs. Seasonal stews and various sushi styles are elucidated.

Fusão. *By Ixta Belfrage.*
This book looks at the indigenous, Portuguese and west African influences in Brazil's culinary landscape, among others. (*Fusão* means fusion in Portuguese.) For Ixta Belfrage—who spent five years working for Yotam Ottolenghi—it is an exploration of her own heritage. Try the black beans stewed in chocolate.

Italopunk. *By Vanja van der Leeden.*
In a year of great pasta cookbooks, "Italopunk" stands out. There is nothing starchy about this manifesto against Italian culinary dogmatism. The author, a Dutch-Indonesian chef, interviews Italian cooks about their struggles to reinvent food in a country obsessed with tradition.

Something from Nothing.
By Alison Roman.
A popular American cook and food writer offers an ode to pantry staples. "Casual" but "elegant" is often what she aims for: supermarket radishes with "very expensive butter" or potato crisps with caviar, which she serves up to impress guests without getting her hands dirty.

History

38 Londres Street. *By Philippe Sands.*
This is the third book in a loose trilogy about Nazis, justice and impunity. The author shows how the long-rumoured friendship between Augusto Pinochet, a Chilean dictator, and Walter Rauff, a Nazi officer, was real.

Allies at War. *By Tim Bouverie.*
A masterful diplomatic history of the second world war. The story of the improbable alliance between "the Big Three" of Roosevelt, Churchill and Stalin is familiar, but packed with fresh detail and gossipy anecdotes.

The CIA Book Club. *By Charlie English.*
Tomes were smuggled on boats, trains and trucks. The CIA funnelled 10m books into the eastern bloc, including George Orwell's "1984", John le Carré's spy thrillers and Virginia Woolf's writing advice. This is the riveting story of "the best-kept secret of the cold war".

The Gods of New York.
By Jonathan Mahler.
Between 1986 and 1989, old New York died and a new one was born. Part of this book's pleasure, especially for readers too young to remember the late 1980s, is that it chronicles a time when several important American political figures first strode onto the public stage.

The Illegals. *By Shaun Walker.*
One of the most compelling and perceptive books on intelligence of the past decade. Shaun Walker combines the methods of the journalist and the historian, vividly describing how the KGB churned out deep-cover spies who often cracked under the pressure.

The Last Days of Budapest.
By Adam LeBor.
This outstanding book chronicles the transformation of one of Europe's finest cosmopolitan capitals during the second world war. Adam LeBor tells the story of how Budapest became a centre of wartime intrigue and espionage, drawing on an impressive range of sources.

Peak Human. *By Johan Norberg.*
A historian explains how golden ages really start—and end. Some of the periods Johan Norberg describes will be familiar to readers, but he deftly punctures popular misconceptions and adds fresh details and provocative arguments.

The Revolutionists. *By Jason Burke.*
A deeply researched account of hijackings, hostage-takings and other terrorist activity in the 1970s, told with verve by the *Guardian*'s international security correspondent. It offers portraits of leftist freedom fighters such as Ilich Ramírez Sánchez (aka Carlos the Jackal) and documents the rise of Islamist extremism.

Strangers and Intimates.
By Tiffany Jenkins.
A fascinating look at how thinking about privacy has evolved over time. One of those rare works that changes how you see the world, with an insight on every page.

The Third Reich of Dreams. *By Charlotte Beradt. Translated by Damion Searls.*
This collection shows that, even in sleep, Germany's fascist regime occupied the minds of its subjects. This remarkable work of journalism, newly translated into English, shows how authoritarianism warps the subconscious.

Those Who Are About To Die.
By Harry Sidebottom.
A historian explains what gladiator shows were really like. To those who think that the Romans—with their businesslike haircuts and underfloor heating—were much like ourselves, this vivid, gripping book offers many correctives.

The Traitors Circle.
By Jonathan Freedland.
The thrilling story of a group of anti-Nazi activists in wartime Berlin, including a countess who hid her Jewish lover in a sofa when the Gestapo raided her flat. Betrayed by an informer, several paid an awful price for their defiance. At bottom the book is an inquiry into how, in the direst circumstances, some people find the immense courage to do what is right.

Politics and current affairs

Arctic Passages. *By Kieran Mulvaney.*
Before long, the Arctic Ocean could be free of ice in summer. That is opening up passages for commercial vessels: in this splendid book a journalist looks at each passage in turn, combining reportage with details of his own voyages.

Daughters of the Bamboo Grove.
By Barbara Demick.
Based on extensive reporting in China and America, this book uncovers how China's one-child policy also led to the widespread seizure of children for international adoption. The author focuses on the abduction of a twin girl in 2002 and her adoption in America; an emotional reunion with her sister in 2019 is movingly described.

The Highest Exam. *By Ruixue Jia and Hongbin Li with Claire Cousineau.*
The *gaokao*—China's university entrance exam—shapes much of the country's society, from pay to politics. Read this thoughtful book to learn how the test is the first of many tournaments in which the Chinese have to compete over the course of their lives.

The Finest Hotel in Kabul.
By Lyse Doucet.
A chronicle of Afghanistan's history since 1969, as it was seen from the Hotel InterContinental Kabul. Lyse Doucet, the BBC's chief international correspondent, writes in a novelistic way; she is a humane narrator who conveys the suffering and resilience of the hotel's staff.

The Hour of the Predator. *By Giuliano da Empoli. Translated by Sam Taylor.*
An Italian-Swiss writer spent years in the corridors of power observing what he sees as the emergence of a new cadre of strongmen in politics and technology, who feed off each other and share a love of disruption. He skewers them with sardonic humour.

I Deliver Parcels in Beijing. *By Hu Anyan. Translated by Jack Hargreaves.*
A bestseller in China recently translated into English. Hu Anyan's straightforward prose and keen eye for detail capture the drudgery of gruelling low-wage work and the personal toll it takes.

In Covid's Wake. *By Stephen Macedo and Frances Lee.*
This insightful book looks at the far-reaching and unexpected consequences of covid-19. The pandemic fed a global surge in inflation, a breakdown of trust in experts and an aggravation of political polarisation.

The Party's Interests Come First.
By Joseph Torigian.
This biography of Xi Zhongxun, Xi Jinping's father, draws on a decade of research using Chinese, English and Russian sources. The book is valuable not only for its portrait of its subject, but also for its insights into his progeny, now the supreme leader.

Righting Wrongs. *By Kenneth Roth.*
A leading human-rights campaigner explains how to curb the cruelty of the world's worst regimes. The key to shaming powerful wrongdoers is to avoid name-calling and "stigmatise with facts".

Russia's Man of War.
By Cathy Scott-Clark.
In 2022 Viktor Bout, a Russian arms dealer, was swapped for Brittney Griner, an American basketball player, after 15 years in American custody. This richly reported biography of Mr Bout benefits from rare interviews with him—though an arms trafficker is perhaps not the most reliable narrator.

We the People. *By Jill Lepore.*
Contrary to the Founding Fathers' wishes, America's constitution is too hard to change, argues a professor at Harvard University and writer for the *New Yorker*. This book offers an arresting chronicle of Americans striving—if sometimes failing—to remake their republic.

When Everyone Knows That Everyone Knows... *By Steven Pinker.*
Common knowledge—knowing that others know something, and that they know we know—is powerful. Thinking about it "illuminates many enigmas of our public affairs and personal lives", a Harvard polymath argues in this fizzing, erudite book.

Why Nothing Works.
By Marc Dunkelman.
This absorbing book argues that excessive regulation, diffuse power and plentiful vetoes have hurt America by blocking housebuilding, infrastructure and effective governance. It crystalises ideas that have been swirling around newspaper columns, think-tanks and social media.

Science and technology

The Age of Diagnosis.
By Suzanne O'Sullivan.
A neurologist asks whether doctors' dogged pursuit of diagnoses is actually beneficial to patients. Many normal conditions are pathologised; with early screenings, people end up being treated for ailments that might resolve on their own. "We are not getting sicker," the author writes in this even-handed book, but "we are attributing more to sickness."

Collisions. *By Alec Nevala-Lee.*
Luis Walter Alvarez won the Nobel prize in 1968 for his work on particle physics. He was also "the world's foremost scientific detective", this enlightening book argues. The list of mysteries on which he consulted, from assassinations to UFOs, would have raised even Sherlock Holmes's eyebrows.

Crick. *By Matthew Cobb.*
A biography of one of the 20th century's greatest scientists. The man who, along with James Watson, determined the structure of DNA, was curious and combative. Most important, he was unafraid to be wrong and abided by a "don't worry method" of trial and error.

Empire of AI. *By Karen Hao.*
This book reveals disturbing traits about Sam Altman, the co-founder and chief executive of OpenAI, and the culture of Silicon Valley that are useful to bear in mind amid the hype about generative artificial intelligence.

Ends of the Earth. *By Neil Shubin.*
This book is full of great facts. An American fossil-hunter corrals the latest science to describe what sets the polar regions apart—and their vital role for the planet. The author sets out the possible consequences of global warming, including the release of hundreds of frozen ancient viruses.

Fair Doses. *By Seth Berkley.*
The story of vaccines, as told by an infectious disease epidemiologist. During the covid-19 pandemic, Seth Berkley fought against political resistance and nationalism to help distribute 2bn vaccines across the world.

Food Intelligence.
By Julia Belluz and Kevin Hall.
A journalist and a respected nutrition scientist explain why the diet wars waged over carbohydrates, fats and protein do not have a clear winner. They parse the biology of human metabolism as well as the gimmicks of the junk-food industry, nutrition hype and ultra-processed foods.

Is a River Alive? *By Robert Macfarlane.*
The author has a pragmatic agenda embedded in his powerful prose: to make an environmental, ethical and aesthetic case for rivers being living subjects that must be endowed with rights. Everyone who has ever found something to love in a river should find something to love in this book. It is a masterpiece.

The Lost Orchid. *By Sarah Bilston.*
When orchidomania swept Europe in the 19th century, the flowers were status symbols akin to a Birkin bag or sports car today. Horticulturists and economists alike will enjoy this colourful tale of the orchid and its multifarious meanings.

The Web Beneath The Waves.
By Samanth Subramanian.
This brief, lyrical survey of the internet's underwater infrastructure and the people who maintain it offers a timely reminder of the extent to which the modern world depends on a fragile filigree of subsea cables—and of the many ways in which the supposedly disembodied online world is vulnerable to physical, commercial and geopolitical interference. ■

All the books on the list were published in America or Britain this year.

Books by The Economist's journalists

Words to the wise

This year our correspondents covered land, war and the working class

Blood and Treasure. *By Duncan Weldon.*
A study of the economics of conflict, from the Vikings to Vladimir Putin's invasion of Ukraine, by a former writer for and occasional contributor to *The Economist.* Time and again, Duncan Weldon spots the invisible hand behind hostilities. "A delightfully quirky approach to military history," thought the *Spectator*. An "enthralling and entertaining book", said *Foreign Affairs.*

The Economic Consequences of Mr Trump. *By Philip Coggan.*
Our former Bartleby columnist explains how Donald Trump's tariffs will impose costs on domestic producers and consumers, alienate allies and distort business decision-making. The president misunderstands the world trading system, the author argues, and his policy will not bring back manufacturing jobs (which have been eliminated by technology). "Sharp, accessible and free from polemic", said the *Financial Times*.

Economics: The Economist Guide.
By Philip Coggan.
A comprehensive guide to how the economy actually works for the general reader. Chapters cover fiscal policy, monetary policy, trade and productivity. The book includes an A-Z of economic terms, which will help anyone baffled by economists' fondness for jargon.

The Economist Quiz Book: 60 Brain Teasers for Inquisitive Minds.
By Tom Standage.
Our deputy editor—called "the Father Christmas of knowledge" by Giles Coren, a British journalist—compiles 60 quirky brain teasers inspired by the best minds at *The Economist*. The puzzles are designed to "probe your ability to find hidden connections, get the facts right and identify misinformation".

The Land Trap. *By Mike Bird.*
Stocks, bonds, crypto and currencies may capture daily attention, but land is the oldest asset, and one of the most important. Our Wall Street editor traces land's development as a financial asset and explains why it is at the centre of political and financial crises. "One of those books that changes the way you see the world," said Ed Conway of Sky News. "A thoroughly enjoyable tour of land's importance in economic history to this day," said the *Financial Times*.

Underdogs. *By Joel Budd.*
Our social-affairs editor describes a group that is much talked about but little understood. This book argues that white working-class people are driving change in Britain, not just digging in against it. The *Guardian* found it "not just well-timed but admirably powerful". "Essential reading", said the *Telegraph.*

Economic & financial indicators

	Gross domestic product, % change on year ago: latest		quarter*	2025†	Consumer prices, % change on year ago: latest		2025†	Unemployment rate, %		Current-account balance, % of GDP, 2025†	Budget balance, % of GDP, 2025†	Interest rates, 10-yr gov't bonds: latest, %		change on year ago, bp	Currency units: per $ Nov 19th	% change on year ago
United States	2.1	Q2	3.8	1.9	3.0	Sep	2.8	4.3	Aug	-4.0	-5.9	4.1		-26.0	-	
China	4.8	Q3	4.5	5.1	0.2	Oct	-0.1	5.1	Oct‡§	2.0	-5.6	1.5	§§	-13.0	7.11	1.8
Japan	1.1	Q3	-1.8	1.0	2.8	Sep	3.1	2.6	Sep	4.3	-2.9	1.8		68.0	156	-0.5
Britain	1.3	Q3	0.3	1.3	3.6	Oct	3.7	5.0	Aug††	-3.0	-4.9	4.5		9.0	0.76	3.9
Canada	1.2	Q2	-1.6	1.1	2.2	Oct	2.0	6.9	Oct	-2.0	-2.6	3.3		-2.0	1.40	nil
Euro area	1.4	Q3	0.9	1.2	2.1	Oct	2.1	6.3	Sep	3.3	-3.2	2.7		37.0	0.86	9.3
Austria	0.3	Q2	-0.5‡	0.3	4.0	Oct	3.4	5.5	Sep	2.1	-4.5	3.0		22.0	0.86	9.3
Belgium	1.1	Q3	1.2	1.1	2.5	Oct	3.0	5.9	Sep	-0.6	-5.3	3.3		34.0	0.86	9.3
France	0.9	Q3	2.0	0.7	0.8	Oct	1.0	7.6	Sep	-0.3	-5.7	3.5		38.0	0.86	9.3
Germany	0.3	Q3	nil	0.2	2.3	Oct	2.2	3.9	Sep	5.4	-2.7	2.7		37.0	0.86	9.3
Greece	1.7	Q2	2.3	2.2	1.6	Oct	2.8	8.2	Sep	-5.8	0.6	3.4		16.0	0.86	9.3
Italy	0.4	Q3	-0.2	0.5	1.3	Oct	1.8	6.1	Sep	1.2	-3.1	3.5		-9.0	0.86	9.3
Netherlands	1.6	Q3	1.5	1.5	3.0	Oct	2.9	4.0	Sep	7.8	-2.4	2.9		28.0	0.86	9.3
Spain	2.8	Q3	2.6	2.8	3.2	Oct	2.5	10.5	Sep	2.7	-2.8	3.2		14.0	0.86	9.3
Czech Republic	2.3	Q2	1.8	2.5	2.5	Oct	2.4	2.8	Q3‡	0.7	-2.1	4.6		64.0	20.9	14.3
Denmark	0.9	Q2	4.2	2.5	2.1	Oct	1.8	2.9	Sep	12.2	2.1	2.6		51.0	6.45	9.2
Norway	-2.1	Q2	3.4	1.1	3.1	Oct	2.8	4.7	Aug‡‡	13.6	9.5	4.1		32.0	10.1	8.8
Poland	3.7	Q3	3.2	3.3	2.8	Oct	3.9	5.6	Oct§	-0.6	-7.0	5.3		-27.0	3.66	11.2
Russia	0.6	Q3	na	0.6	7.7	Oct	8.8	2.2	Sep§	1.7	-2.7	14.3		-198	81.1	23.3
Sweden	1.8	Q3	4.5	1.5	0.9	Oct	2.3	8.9	Oct§	6.5	-1.3	2.7		58.0	9.47	15.1
Switzerland	1.3	Q2	0.6	1.2	0.1	Oct	0.2	3.0	Oct	6.0	0.5	0.2		-20.0	0.80	10.0
Turkey	4.8	Q2	6.6	3.2	32.9	Oct	34.5	8.6	Sep§	-1.2	-3.6	30.1		171	42.3	-18.5
Australia	1.8	Q2	2.4	1.9	3.2	Q3	2.7	4.3	Oct	-2.1	-1.8	4.4		-18.0	1.54	nil
Hong Kong	3.8	Q3	2.8	3.1	1.1	Sep	1.6	3.8	Oct‡‡	13.3	-4.9	3.0		-47.0	7.79	nil
India	7.8	Q2	7.4	6.5	0.3	Oct	3.2	7.5	Oct	-1.0	-4.4	6.5		-28.0	88.5	-4.7
Indonesia	5.0	Q3	4.1	5.0	2.9	Oct	1.9	4.9	Aug§	-1.1	-3.1	6.1		-75.0	16,734	-5.3
Malaysia	5.2	Q3	9.0	4.8	1.5	Sep	1.4	3.0	Sep§	1.1	-3.9	3.4		-43.0	4.16	7.5
Pakistan	3.7	2025**	na	3.7	6.2	Oct	3.5	6.3	2021	-1.5	-5.5	11.9	†††	-19.0	282	-1.4
Philippines	4.0	Q3	1.6	5.0	1.7	Oct	1.6	5.3	Q3§	-3.8	-5.7	5.9		-25.0	58.8	-0.2
Singapore	2.9	Q3	5.4	3.7	0.7	Sep	0.8	2.0	Q3	14.6	0.2	1.9		-93.0	1.30	3.1
South Korea	1.7	Q3	4.7	1.0	2.4	Oct	2.0	2.2	Oct§	5.5	-2.4	3.3		26.0	1,459	-4.6
Taiwan	7.6	Q3	5.3	7.2	1.5	Oct	1.7	3.4	Sep	18.4	1.8	1.3		-21.0	31.1	4.4
Thailand	1.2	Q3	-2.2	1.8	-0.8	Oct	-0.1	0.8	Sep§	2.0	-5.8	2.1		-48.0	32.4	6.7
Argentina	6.3	Q2	-0.2	3.8	31.3	Oct	41.8	7.6	Q2§	-2.3	0.1	na		na	1,400	-28.7
Brazil	2.2	Q2	1.5	2.2	4.7	Oct	5.0	5.6	Sep§‡‡	-3.2	-6.4	13.7		78.0	5.32	8.1
Chile	1.6	Q3	-0.6	2.4	3.4	Oct	4.3	8.5	Sep§‡‡	-2.6	-1.7	5.3		-64.0	932	4.3
Colombia	3.4	Q3	5.0	2.5	5.5	Oct	5.0	8.2	Sep§	-2.5	-7.5	12.2		176	3,738	17.7
Mexico	-0.2	Q3	-1.2	0.7	3.6	Oct	3.8	2.7	Sep	-0.4	-3.8	8.9		-108	18.3	10.2
Peru	2.8	Q2	1.8	3.1	1.4	Oct	1.6	5.5	Oct§	1.9	-2.5	5.8		-91.0	3.37	12.8
Egypt	5.0	Q2	13.7	4.3	12.5	Oct	14.1	6.4	Q3§	-2.5	-7.7	na		na	47.2	4.9
Israel	3.5	Q3	12.4	2.7	2.5	Oct	3.0	3.2	Oct	2.4	-4.6	3.9		-84.0	3.28	14.0
Saudi Arabia	2.7	2024	na	4.4	2.2	Oct	2.1	3.2	Q2	-2.2	-5.3	na		na	3.75	nil
South Africa	0.6	Q2	3.4	1.2	3.5	Oct	3.3	31.9	Q3§	-0.8	-4.4	8.7		-45.0	17.2	4.4

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 Nov 19th	% change on: one week	Dec 31st 2024
United States S&P 500	6,642.2	-3.0	12.9
United States NAS Comp	22,564.2	-3.6	16.8
China Shanghai Comp	3,946.7	-1.3	17.8
China Shenzhen Comp	2,473.3	-1.4	26.4
Japan Nikkei 225	48,537.7	-4.9	21.7
Japan Topix	3,245.6	-3.4	16.5
Britain FTSE 100	9,507.4	-4.1	16.3
Canada S&P TSX	30,278.4	-1.8	22.4
Euro area EURO STOXX 50	5,542.1	-4.2	13.2
France CAC 40	7,953.8	-3.5	7.8
Germany DAX*	23,162.9	-5.0	16.3
Italy FTSE/MIB	42,651.5	-4.8	24.8
Netherlands AEX	933.3	-3.6	6.2
Spain IBEX 35	15,889.3	-4.4	37.0
Poland WIG	110,230.9	-2.2	38.5
Russia RTS, $ terms	1,029.8	4.8	15.3
Switzerland SMI	12,530.6	-2.1	8.0
Turkey BIST	10,903.9	2.5	10.9
Australia All Ord.	8,721.4	-3.9	3.6
Hong Kong Hang Seng	25,830.7	-4.1	28.8
India BSE	85,186.5	0.9	9.0
Indonesia IDX	8,406.6	0.2	18.7
Malaysia KLSE	1,623.9	-0.5	-1.1
Pakistan KSE	162,226.3	2.6	40.9
Singapore STI	4,505.2	-1.4	18.9
South Korea KOSPI	3,929.5	-5.3	63.8
Taiwan TWI	26,580.1	-4.9	15.4
Thailand SET	1,272.2	-1.0	-9.1
Argentina MERV	2,869,723.5	-3.8	13.3
Brazil BVSP*	155,380.7	-1.4	29.2
Mexico IPC	62,066.3	-1.8	25.4
Egypt EGX 30	40,509.2	0.7	36.2
Israel TA-125	3,438.3	-1.4	41.7
Saudi Arabia Tadawul	10,998.7	-2.3	-8.6
South Africa JSE AS	112,019.3	-0.8	33.2
World, dev'd MSCI	4,257.7	-3.6	14.8
Emerging markets MSCI	1,361.8	-3.3	26.6

US corporate bonds, spread over Treasuries

Basis points	latest	Dec 31st 2024
Investment grade	101	95
High-yield	377	324

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

Commodities

***The Economist* commodity-price index, 2020=100**	Nov 11th	Nov 18th*	% change on: month	year
Dollar Index				
All items	138.4	138.3	0.9	5.4
Food	146.2	146.1	1.6	2.1
Industrials				
All	131.9	131.9	0.3	8.7
Non-food agriculturals	123.2	125.9	-0.8	-6.5
Metals	134.1	133.4	0.6	13.2
Sterling Index				
All items	134.9	135.2	2.7	1.6
Euro Index				
All items	136.4	136.4	1.1	-3.6
Gold				
$ per oz	4,113.0	4,050.5	-2.2	54.3
Brent				
$ per barrel	65.2	64.9	5.8	-10.9

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

Gillian Tindall

The historian of unlauded places and people died on October 1st, aged 87

As you cross London's Millennium Bridge from the North Bank to the South, a curious run of houses faces you. Squeezed between the new Globe theatre and the Tate Modern are three small, old houses, two of red brick and one, taller, of three storeys faced with white stucco. It sits beside Cardinal Cap Alley, one of the city's narrowest, and its address is 49 Bankside. The two houses beside it were reconstructed after bombing, but 49 Bankside is the genuine article. It was rebuilt in 1710, in the graceful proportions of the age, and now draws covetous looks. Who would not dream of living in this little leftover house and gazing, from the front windows, straight at the dome of St Paul's?

Gillian Tindall did more than dream. She contacted the owners and, in "The House by the Thames", told the whole history of the house and the neighbourhood. Before Number 49 there was a medieval inn, the Cardinal's Hat, and Bankside was a place of stinking tanneries, Flemish whores and price-gouging bargemen. The house had its own ups and downs: at first elegantly middle-class, with lavish wood panelling; in the next century, a house for wharfhands and rabbit-skinners, surrounded by coal-heaps; then, by 1901, the dwelling of three struggling families, including in the tiny attic a crippled young woman called Marion, cooking sweets for sale over a stove.

Miss Tindall could not walk any street, or visit any house, without sensing the layers beneath. Towns were palimpsests, where the past was never quite scratched away. The earth of London was not just clay and gravel but also the dust of houses and people gone before. In her own battered patch of north London, Kentish Town, roads followed now-entombed rivers and old hedgerow lines. In Sainsbury's she stood on the burial ground of a vanished chapel of ease, and therefore on the bones of people who, like her, bought milk and bread. After several novels, her first non-fiction book, "The Fields Beneath", took its title from words on the lintel of a local house. Ever after, idylls of pastures, cows and a silvery Fleet river gained a certain hold on the neighbourhood.

Her own house had been built as a rural retreat in 1828, with a garden still long enough for an orchard. Inside she shared space with all those who, like her, had put their hand on just the same opportune spot on the turn of the banister when going up to bed. She was haunted by the Pikes, 19th-century residents who had left, under the floorboards and between the joists, hundreds of Temperance tracts. They had also warred crazily with their neighbours, and she conjectured that a deep scar on the banister rail might be something to do with them.

People like the Pikes, or like Marion at 49 Bankside, especially drew her attention: the overlooked characters of history, the unconsulted, who nevertheless had as many anxieties, passions and hopes as the famous. That interest had started when she first went to London's East End in 1963, a wide-eyed girl not long out of Oxford, arriving to interview aged widows in run-down but solid houses that were about to be swept away. Under the Greater London Plan, they told her, "It's all coming down round here, dear." Over tea with tinned milk they remembered markets, celebrations, neighbourliness, thriving shops: all disappearing.

As for her, she developed a lifelong hatred of planners. Those of the 1960s were outright Stalinists who, in the name of some Brave New Future, simply bulldozed communities away. Matters gradually improved, but she still spent long hours at meetings of the London and Middlesex Archaeological Society, examining planning applications. She also co-founded the Camden History Society, and wrote pointed opinion pieces for the *Guardian* and the *Observer*, to keep the pressure up. She did not object to big projects on principle: Crossrail gave her fodder for another book, and even HS2 was tolerable in theory. But she could not forget that Kentish Town had been despoiled for ever not only by London's sprawl, but by the coming in the 1860s of the Midland Railway.

Her hunger for evidence and exactitude made archives her natural home. She revelled in Census records, vestry ledgers and yellowing, discursive old newspapers. But maps gave her the greatest joy of all. She would pore over them so intently that she almost willed them to draw her right in, revealing every brick, tree, step and stone. She treasured the little figures on ancient maps, playing, fighting, conversing or loading boats; living.

The most intriguing documents she ever found, though, were not in an archive, but in a small cardboard case left on the mantelshelf of a house which she and her husband Richard bought in 1973 in Chassignolles, in central France. These, neatly folded, were marriage proposals from six different men written in the 1860s to Célestine Chaumette, the daughter of a village innkeeper. Some were polished, some endearingly clumsy, from young men not used to spelling. "Before anything else I would like to know if I suit you," one began. Each suitor was rejected. This cried out for another book, not merely about Célestine but about the village and the huge social changes there between 1844 and 1933, the span of Célestine's life. At its beginning, Chassignolles was a place isolated in oak woods and spectre-haunted hills, where the chief trade was clog-making. At its end cars, telephones, and again a nearby railway all forced the modern world in.

As its chronicler, she missed hearing the clatter of clogs in its streets. But she could revive them. Similarly, on the shores of the Thames, she missed the coarse banter of the ferrymen and the smell of open drains, but she could bring them back. The past never entirely went away. One night, baby-watching, she heard her small son Harry singing "London Bridge is Falling Down". She hoped that children would still be singing about London Bridge, and that 49 Bankside would still be standing, long after she had joined the crowds walking into the unknown. ■

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Contributors include:

Daniel Kahneman
(1934-2024)
Nobel laureate in economics; filmed 2023

Kate Raworth
Author and economist

Tom Standage
The Economist

Timandra Harkness
Author and broadcaster

Tom Chatfield
Author and broadcaster

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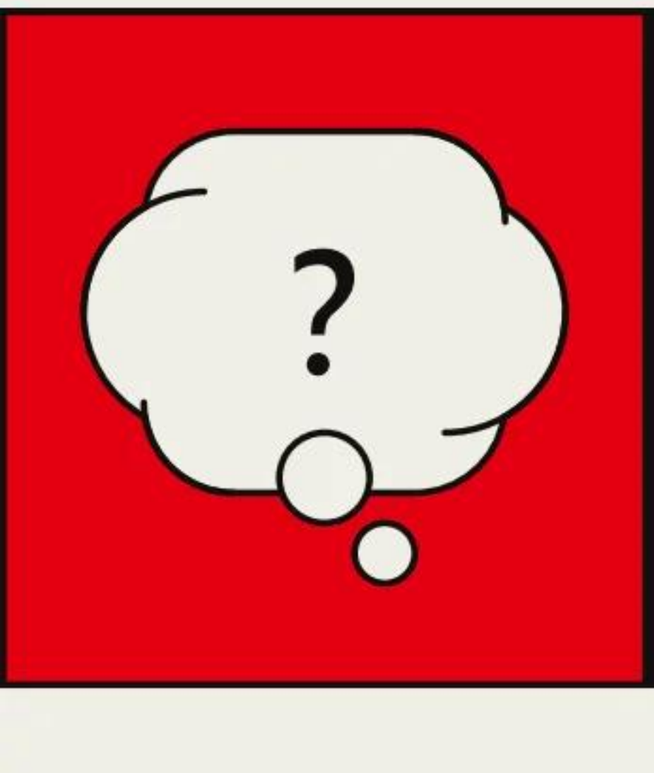

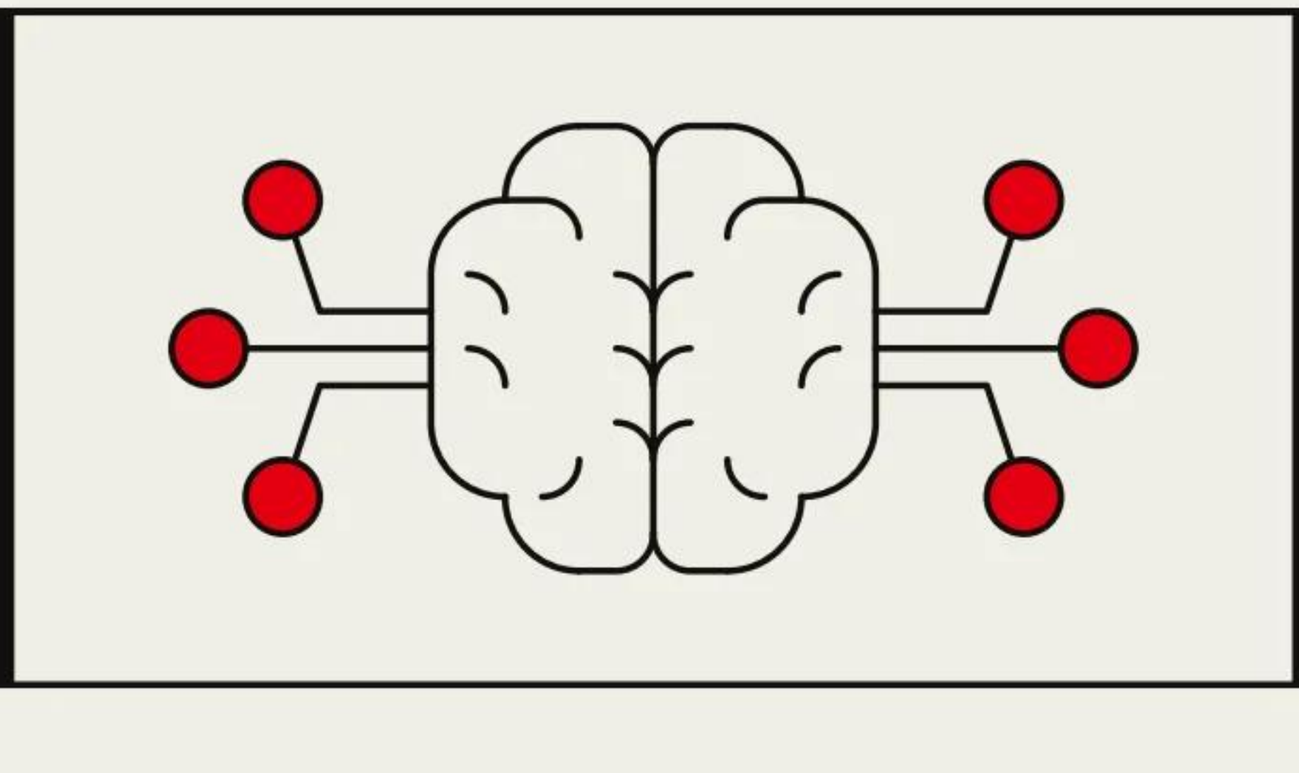

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