The Economist

Get ready for a housing crunch

A portrait of China's next leaders

Brazil's dismal election

Jack the knife: the cost of pointless surgery

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WHEN AMERICA WALKS AWAY

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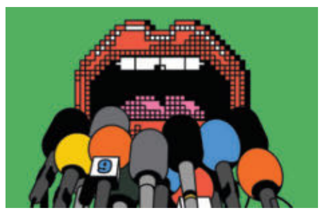

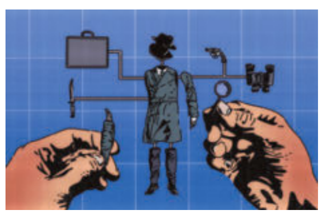

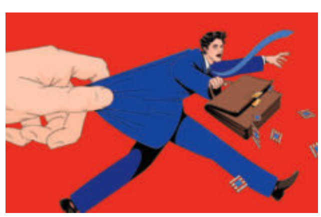

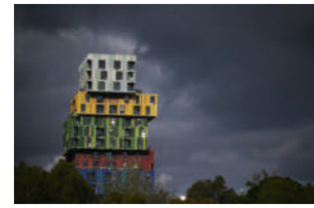

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The world this week Politics

Xi Jinping made his first state visit to America since 2015 (he has made other kinds of visits since then). Donald Trump and China's leader prepared to discuss a range of thorny issues. A trade agreement that was set to expire in November was extended until January 10th. AI was also on the agenda. As was Taiwan; China's government has been angered by America's weapons sales to the island. Since his visit to China in May the American president has cast doubt on whether a $14bn arms package for Taiwan will go ahead.

Two of **China's** most senior generals, Zhang Youxia and Liu Zhenli, were expelled from the Communist Party and the armed forces for alleged disloyalty and corruption. They had been placed under investigation in January amid a sweeping purge of China's military leadership.

Mr Trump told the UN General Assembly that he had a big decision to make: whether to "annihilate" **Iran**, driving the Iranians "into hell", or to make a deal that would end the war and allow the country to rebuild. He suggested that the two sides would reach a deal after America's midterm elections in November. American and Iranian officials, including Steve Witkoff, Mr Trump's envoy, and Abbas Araghchi, Iran's foreign minister, held their first talks since a ceasefire agreed to in June collapsed. Mr Trump described the meeting as "very productive".

The **Houthis**, Iranian-backed rebels in Yemen, said they had carried out drone and missile attacks on **Saudi Arabia**, targeting the capital, Riyadh, and energy sites. The Saudis said they shot down a missile fired at Riyadh but did not confirm if there were any further strikes.

Binyamin Netanyahu, **Israel's** prime minister, accused Zohran Mamdani, the mayor of New York, of supporting Hamas and of inciting hostility towards Jews. Mr Mamdani has called Mr Netanyahu a war criminal. Mr Netanyahu also described remarks by Emmanuel Macron that Hamas was "never very active" in the West Bank as "grotesque". French officials said Mr Macron's words had been mistranslated.

In **Sri Lanka**, 15 people were jailed for plotting the Easter Sunday bombings on churches and hotels in 2019, which killed 269 people. The suicide-bombers had links to militant Islamists. The bombings boosted the presidential campaign of Gotabaya Rajapaksa, who went on to win the election. Various officials have been fined and even sentenced to death for negligence.

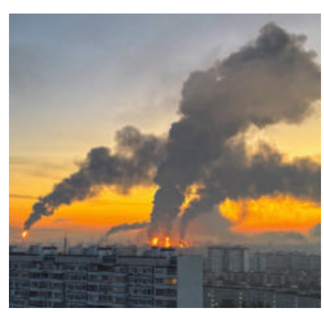
Delcy Rodríguez, **Venezuela's** interim president, met Mr Trump at the UN. Mr Trump crowed about a deal granting America preferential access to Venezuelan oil: "to the victor belong the spoils." Ms Rodríguez promised free elections but gave no timetable. María Corina Machado, Venezuela's popular exiled opposition leader, was prevented three times in a week from returning home.

A thaw over Greenland

America, Denmark and **Greenland** signed a deal that Europe hopes will end Donald Trump's threats to annex the Arctic territory. America, which has long been allowed to build military bases on Greenland, now has stronger guarantees that it can do so, and that Russia and China cannot. Critics said the deal could have been struck without alienating European allies.

Mr Trump rejected calls to impose controls on **artificial intelligence** as a "globalist scheme". AI executives, including Sam Altman from OpenAI, briefed the UN Security Council on the technology's potential threat to humanity. In the latest AI security breach, it emerged that an OpenAI agent independently hacked files at an **Australian** government health agency in June. OpenAI didn't notice until August. Mr Trump urged the world to change AI's name to "super intelligence".

American politicians complained about the **cost of diesel**, which has soared since Mr Trump attacked Iran. Chuck Grassley, a senator from Iowa, called for the suspension of diesel exports and a relief programme "to help American farmers and truckers". Diesel prices jumped in Europe amid fears that American supplies will be cut off. Mr Trump was reported to have asked Volodymyr Zelensky to stop attacking Russian oil refineries in order to relieve a squeeze on global supplies of diesel.



Ukraine attacked **Moscow** with waves of drones. At least 450 were shot down, according to the Russian capital's mayor, who claimed the barrage was "unprecedented". Several hit one of Russia's biggest refineries, located in the south of the city.

Ukrainian drones interrupted an otherwise predictable **Russian** parliamentary election. The tightly controlled ballot was won easily by United Russia, which has ruled the country since 2001 and backs Vladimir Putin. Turnout was said to be around 60%. Yabloko, an anti-war party, was banned from participating.

The centre cannot hold

Friedrich Merz vowed to stay in office as **Germany's** chancellor, after his Christian Democrats (CDU) suffered another humiliating defeat at a state election. The party took just 4.9% of the vote in Mecklenburg-Vorpommern, its worst result since the second world war. The Alternative for Germany (AfD) won around 40% of the ballot; mainstream politicians say they will not work with the populist-right party. In **Berlin's** city-state election, the CDU fell to second place behind Die Linke, a left-wing party that has pledged to expropriate 200,000 properties from corporate landlords.

War resumed in **Tigray**, a province in northern **Ethiopia**, shattering a fragile agreement that ended a civil conflict between the federal government and the local ruling party, the Tigray People's Liberation Front, in 2022. The resumption of fighting threatens a wider conflict following an announcement by several rebel groups, including the TPLF, of an alliance to depose Abiy Ahmed as prime minister.

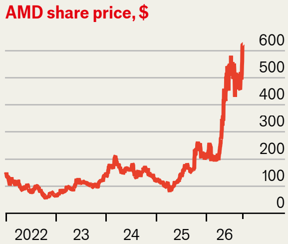
Salva Kiir, the president of **South Sudan**, dissolved the transitional government. Mr Kiir, who will remain in charge of a caretaker administration, says the point is to prepare for long-delayed elections scheduled for December. More probably, the move is the latest in a series of power grabs that could reignite the civil war.

A judge ordered the White House to temporarily restore the credentials of three **media organisations**, CNN, MS NOW and Politico, after their journalists were banned from entering the premises. Mr Trump had accused the outlets of reporting fake news. They accuse the administration of violating their First Amendment rights.

The world this week Business

After months of uncertainty, **Paramount Skydance** reached a settlement with 12 states, led by California, that had sued to stop its takeover of **Warner Bros Discovery**, arguing it would damage the film industry. Under the agreement Paramount is committed to spend an extra $1.5bn over five years on domestic film production and must distribute at least 30 movies a year in cinemas for the next two years, and 32 a year for the following three years, or pay heavy fines. California's politicians had been rattled by Paramount's threat to leave the state. Its attorney-general said the settlement "is not a vote of support" for the merger, but it does clear the way for its completion.

AMD share price, $



Source: FactSet

Investors shrugged off talk about AI's potential to wipe out humanity to spur another **rally in tech stocks**, pushing the NASDAQ Composite to a new record. AMD became the fourth American chipmaker to rise above a market valuation of $1trn. Investors have had occasional moments of doubt this year over the prospects for AI, though the overall trend for tech stocks has been positive, so far.

Meta also saw its stock surge, after its Muse personal AI agent became the most downloaded free app on the Apple store. Meta promotes the app by claiming users can work their Muse to save money, improve health, shop smarter, and even improve relationships.

British Columbia launched a lawsuit against OpenAI, accusing the firm of failing to tell the police about the risk posed by a deadly shooter, who killed five children and an adult at a school in February and two relatives. OpenAI's **safety team** had flagged the perpetrator's ChatGPT account because of its focus on gun violence, but a recommendation to inform the police was overruled, according to the suit.

Let it flow, let it flow

Saudi Arabia reportedly began pumping oil again through its **East-West pipeline**, which terminates at the Red Sea port of Yanbu. Operations had been suspended after a number of drone strikes on pumping stations, which the Saudis blamed on militias in Iraq. News that crude would begin flowing again briefly eased the strain on oil prices.

Under pressure from America to normalise monetary policy, the **Bank of Japan** raised its main interest rate by a quarter of a percentage point, to about 1.25%. The bank's governor, Ueda Kazuo, suggested more rate increases were on the cards in the bank's battle against inflation.

There was another sell-off in **bond markets**, as traders bet that the Federal Reserve will increase interest rates again in October. The daily yields on US government notes rose the most since Donald Trump's Liberation Day tariffs in April 2025, with the yield on ten-year Treasuries back over 5%. In Japan, yields on benchmark government bonds hit their highest level in three decades.

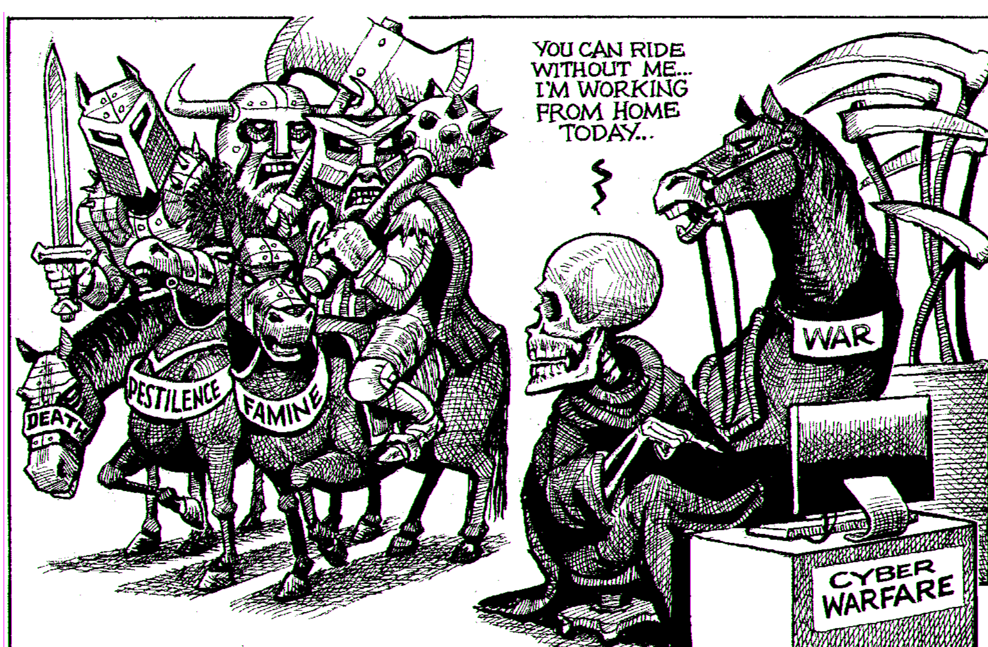
The British government received another warning shot from bankers over the possible imposition of a **windfall tax**. Unions have called on Labour to tax banks when it unveils its budget in October. But UK Finance, a bankers' association, said such specific levies would undermine Britain as a place for banks to invest. In July Jamie Dimon, the boss of JPMorgan Chase, warned of "adverse consequences" if Britain imposed punitive taxes on the financial sector, which could force the bank to revisit its decision to open a big office complex in London.

Volkswagen's share price fell again, after the carmaker announced that it would write down the valuation of its stake in Porsche by €6bn ($6.9bn). Including other items such as restructuring costs and the slowdown of its business in China, the carmaker thinks annual operating profit could take a hit of up to €10bn. Adding to its woes, VW was booted out of the blue-chip Euro Stoxx 50 following a review by the stock-market index's provider. The company's share price is down by 30% this year.

Qantas announced that it will start operating non-stop flights between Sydney and New York in 2028, with a flying time of 18 hours. The Australian airline plans to begin non-stop flights from Sydney to London next year, which will last 22 hours. It will charge extra for the new long-haul schedules, insisting they will be profitable.

The old guard

Warren Buffett formalised the handover of his role as chairman of Berkshire Hathaway to his son, Howard. Mr Buffett senior, who is 96, relinquished the job of chief executive at the start of the year to Greg Abel. Despite stepping down as chairman he will remain on Berkshire's board to dispense his wisdom. In a letter to the firm's shareholders, he said that Howard Buffett, 71, "will guard its culture and values, both worth more than anything on our balance-sheet".



When America walks away

For decades America has enjoyed hegemony over the Middle East. That is about to end

America seems to be stuck in the Middle East. It has no easy way out of its war with Iran. Yet the conflict, however it ends, will in fact mark something quite different: the moment when America pulls back from the region—in the sense that it finally relinquishes its hegemony there. For the first time since the great powers dismembered the Ottoman empire a century ago, the Middle East's overarching order will no longer be imposed from afar. Will that herald an orgy of score-settling and violence, or a new beginning?

Since the first world war, the birthplace of the world's three great monotheistic religions has suffered misery heaped upon misery. Arabs who had fought alongside the war's victors felt betrayed when Britain took control of Iraq, Jordan and Palestine, and France helped itself to Lebanon and Syria. Nationalist leaders, including Gamal Abdel Nasser of Egypt, later fell under the spell of ruinous Soviet-inspired economic policies. The staggering abuse of human rights by dictators such as Saddam Hussein in Iraq and Hafez al-Assad in Syria was matched only by the violent fanaticism of the jihadists nourished by their sadistic rule.

After three wars, countless covert operations and seemingly endless rounds of diplomacy, America's attempts to impose its designs have run their course. Like Britain, France and Russia, America will still be involved. It will occasionally use military force to pursue its interests, including for counter-terrorism. But it will abandon its role as architect.

The signs of America's looming retrenchment are unmistakable—even as President Donald Trump uses the annual meeting of the UN to threaten Iran with "annihilation" for the umpteenth time. Two stand out. Earlier this month America declined to join its ally Saudi Arabia in striking the Houthis in Yemen, who are endangering shipping in the Red Sea. Instead it held talks behind the Saudis' backs to spare American vessels from attack. That may seem like a detail, but when a superpower does deals with an insurgent militia, everyone understands it wants to cut its commitments.

The other sign is the expectation that America will limit its presence in the Middle East. In peacetime it has 30,000-40,000 troops on 19 bases, eight of which are permanent. However, the war has exposed how vulnerable they are to drones and cheap missiles. America has therefore been obliged to depend on aircraft-carriers and its Indian Ocean base on Diego Garcia. Some experts are arguing that it should concentrate its forces in a few places, such as Israel and Jordan.

This fits a broader realignment in which, as NBC reported this month, 25,000-40,000 American troops could be pulled out of Europe, too. The Trump administration is focused on the Americas. Securocrats want to equip America for the growing rivalry with China which, as this week's Trump-Xi summit shows, teeters between wary co-existence and outright hostility. Neither goal is advanced by Middle Eastern wars that empty America's arsenals and suck its forces out of Asia.

And to what end? Until 2020 America was an oil importer; today it is a colossal exporter. China, by contrast, has become Gulf producers' biggest customer, and the Suez canal carries its goods to European markets. That makes China the great external beneficiary of America's policies. But it is unlikely to try to step in as the Middle Eastern hegemon—not when it has seen the trillions of dollars and thousands of lives America has paid for the privilege.

Instead, three of the region's countries have the heft to begin to fill the vacuum—and none of them is Arab (see Middle East & Africa section). The most dangerous is Iran. If the regime in Tehran collapses, it will be in no position to rebuild its malign influence across Iraq, Syria and Lebanon. If, as is likely, it survives, it will hope to extract rents by controlling the Strait of Hormuz and bullying the Gulf states that it has attacked in the war. It will also try to rebuild its militias abroad. It may well restart work on a nuclear weapon, which will surely remain a red line for America. In all this, it may receive Russian backing.

The second regional power is Turkey, which has been quietly building closer relations with Arab countries. It has become the main supporter of the new government in Syria. With Iraq, it is working on trade routes, water supplies and countering Kurdish separatists. Last month it signed a security agreement with Pakistan and Saudi Arabia. Although it has championed the Muslim Brotherhood, it is more pragmatic than ideological, seeking business for its defence industry and construction firms.

The third is Israel, the dominant military and intelligence power. After the massacres of October 7th 2023 it sees itself as a modern Sparta, seeking to destroy any capability that might threaten it. Under the Abraham accords, it has forged close ties with the United Arab Emirates, even as the prospect of a deal with the Palestinians has faded.

These three countries are unlikely to live with each other in peace. Israel and Turkey are already at loggerheads in Syria. Israel and Iran have unfinished business over the war. Iran and Turkey are ancient imperial rivals.

The losers are the Arab states. Countries such as Iraq and Syria are still struggling to emerge from the ashes of civil war. Egypt, once the natural leader of the Arab world, devotes its energy to corruption and crushing opposition at home. The Gulf monarchies have embraced a prosperity agenda that seeks to anaesthetise ideology with economic growth. That is welcome, but their business model depends on American security. The rivalries of ultra-rich Qatar, Saudi Arabia and the UAE are radiating instability—perhaps America's parting gift could be to help them work together.

Arabs have long yearned for a chance to recover lost glory from when they were a beacon of science and learning centuries ago. America's retrenchment is about to give them a chance. But each departing hegemon has left a legacy of frustrated designs and unintended consequences. There remain deep hatreds and unsettled scores. The Middle East will struggle to prove the doubters wrong. ■

Housing markets

The new mortgage shock

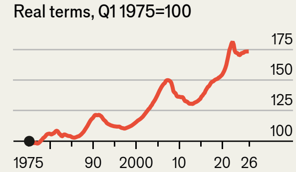
Why house prices may be in trouble

LIKE MANY politicians, Donald Trump dreams of having his cake and eating it. In January he told his cabinet that he wanted to make houses more affordable, but also "to drive housing prices up for people that own their homes". A government that could do both would be a true cakeistocracy. In the real world, only homeowners have been gorging: house prices are near record highs in many rich countries. Homebuyers have gone hungry, especially after post-covid inflation pushed up bond yields in 2022-23, making mortgages more expensive.

Now bond yields are rising again, and mortgage rates with them, as central banks raise interest rates to fight stubborn inflation while governments suffer from debt bloat and fiscal heartburn. The average rate on a new 30-year home loan in America is nudging 7%, up from a bit over 6% a year ago and nearly double what it was before the pandemic. Borrowing costs are rising in other wealthy countries, too. This time, however, the result may be lower house prices. This is something that, for all their cakeist proclivities, politicians should welcome.

Rich-world house prices

Real terms, Q1 1975=100



The latest bout of interest-rate rises is not yet as acute as the previous one. But the housing market today is less resilient than it was (see Finance & economics section). As variable-rate mortgages have spread across the rich world, the prospect of higher monthly payments may deter buyers, particularly now that households have mostly run down their covid-era savings. Meanwhile, the supply of houses is up a bit compared with the 2010s.

House prices are unlikely to fall much in nominal terms—they seldom do, outside deep recessions. Yet even a decline after adjusting for inflation could be a healthy digestive.

For a starter, if many people are unable to afford a home it weighs down the economy, especially in big cities that power 21st-century commerce. Although wage growth has comfortably outpaced inflation in America, the total cost of owning a home has grown even faster in recent years. Cheaper houses would be of particular benefit to first-time buyers, who often struggle to save enough for a down payment.

Falling prices may also reanimate the housing market. In the past few years it has frozen rigid in places where fixed-rate mortgages remain popular, as they are in America. Homeowners there have clung on to their rock-bottom mortgage fixes, meaning that fewer homes have changed hands in the past four years than at any point since the global financial crisis of 2007-09. This has curbed economic dynamism by making people less willing to move elsewhere to seek better jobs. In today's economy homeowners may at last prefer to sell now rather than wait for prices to fall further.

The last benefit of a housing slump is to remind people that houses are a poor long-term investment. For decades governments have told households to treat their homes as saving vehicles, and in many countries lavished them with tax breaks. A house has virtues as an asset: investors can count on a premium on account of its illiquidity and it gives ordinary mortals access to financial leverage (setting aside the wild world of retail options trading).

Yet treating your house as a financial asset violates some basic tenets of investing, which becomes apparent when prices fall. It is undiversified (unless you are a serial landlord), related risks are hard to hedge (insurance gets you only so far) and returns are highly correlated with your future income (a downturn could bring down both your wages and the value of your property). Plus the more a family's finances are tied up in a home, the greater the NIMBY temptation to block development, which could dilute its value.

The causes of the latest rise in interest rates—inflation, debt, geopolitical tensions—are nothing to cheer. Its effect on house prices may offer some cake crumbs of comfort. ■

Lula v Bolsonaro, again

Brazil turns its back on the future

The forthcoming election will not provide the change the country needs

BRAZIL IS BLESSED. Its proven reserves of oil are huge and growing. Within its borders the world's largest river, the Amazon, flows through its greatest rainforest. More than half of Brazil's electricity comes from hydropower. Its farmland is among the most productive on the planet; it will soon become the largest exporter of food, overtaking America. Beneath its soils lie vast deposits of rare-earth minerals. Its 220m people are enterprising, creative and diverse. Brazil's vast potential has long been apparent. When the capital, Brasília, was built in the 1950s, its streets were laid out in the shape of an aeroplane, symbolising a country ready to take off.

Yet it is still stuck on the runway. Over the past half-century, rather than taking wing, Brazil's economy has stagnated relative both to its peers and average global growth. The general election on October 4th offers little hope of a turnaround. The choice before Brazilians is bleak (see Briefing).

The incumbent left-wing president, Luiz Inácio Lula da Silva, known as Lula, faces Flávio Bolsonaro, the eldest son of his right-wing populist predecessor, Jair. Lula is about to turn 81, the same age Joe Biden was when he dropped his re-election bid in 2024. He is a democrat, and sound on the environment. But he has done precious little to unleash growth or restrain ▸▸

spending. He has failed to push economic reforms, bar a sales-tax simplification, and calls fiscal discipline "nonsense". His government is on course to end the term with the largest public-debt-interest bill in a quarter of a century.

The junior Bolsonaro, who is only 45, denies that humans are causing climate change, questions the integrity of voting machines and hints that he will not honour the result if Lula wins. He has been investigated for alleged ties to violent criminals, which he denies. His main policy is to pardon his father, who in September 2025 was handed a 27-year sentence for plotting a coup—including a plan to assassinate Lula—after losing his re-election bid in 2022.

The pair are tied in the polls, with Flávio on the rise. Neither man is credible when it comes to tackling Brazil's two biggest problems: entrenched corruption and the relentless expansion of public spending. Without a sound plan to shrink public debt relative to GDP, the risk of a debt-interest spiral will keep borrowing costs high, starving the economy of the capital it needs to raise productivity and growth. Ever-expanding government spending drives inflation, forcing the central bank to keep interest rates high. Shrinking that debt and lowering rates will require deep cuts to government spending, 92% of which is mandated either by law or by Brazil's absurdly overprescriptive constitution.

In the absence of stronger growth, the jockeying of political elites to control public resources makes many ordinary Brazilians feel hopeless, an advantage for politicians who operate at the extremes. Corruption also undermines the institutions that provide Brazil's checks and balances. A few weeks after Jair's conviction, a scandal known as Banco Master erupted and quickly engulfed the Supreme Court. Police investigations have so far shown that five of the court's 11 justices had connections to Daniel Vorcaro, the playboy mastermind behind it. This feeds public cynicism, making it easier for Brazilians to overlook Jair's conviction for coup-plotting and back his son.

The candidate whose ideas match the moment most closely is Renan Santos, a hard-charging libertarian. He wants to enact deep structural reform and spending cuts to transform Brazil into a great power. But neither he nor any other outsider has made headway against the opposing political machines of Lula and Mr Bolsonaro. The country is drifting towards a predictable crisis, but most of its political elite are too comfortable with the way things are to change course.

And so Brazil's glittering future will be on hold for at least four more years. It is not quite dead. Despite the corruption and insular thinking of pork-barrel politicians, many of the country's vital institutions still work. The federal police have done remarkably well to investigate the Vorcaro fraud, and the coup plot before that; the press remains ferocious, independent and relatively well funded; the diplomatic corps is respected around the world. Even the Supreme Court, despite its abundant flaws, was able to send a coup-monger to jail.

The most likely trigger for a crisis would be a sharp acceleration in the level of debt and borrowing costs leading to a worsening economy. That is a vicious circle, familiar to older Brazilians, which could lead to falls in the value of the real, yet more inflation and a painful recession. Perhaps only then would Brazilians turn to someone prepared to make the unpopular case that sacrifices will be needed for a future in which a blessed country is never again condemned to choose between two such dismal candidates. ■

Health care

The cost of cutting

Back and shoulder surgery is often worse than useless. Millions of operations should be scrapped

SIX IN TEN Britons have surgery at some point. So do lots of Americans, at a cost of perhaps $500bn a year, a third of all spending on adults in the world's biggest health-care market. Plenty of these procedures save lives, by removing tumours, transplanting new organs or mending broken ones. Many others make life better, say by restoring vision (cataract extraction) or hearing (tympanoplasty, for example). Yet a growing body of evidence suggests millions of surgeries performed each year are unnecessary—and, given the risk of complications when a person is sliced open, often worse than useless.

Of ten common orthopaedic procedures, a specialty which accounts for a quarter of all operations in Britain and a similar share in America, only three—for carpal tunnel and total replacement of knees and hips—offer outcomes that are clearly superior to non-operative care. Six, including common ones like lumbar-spine decompression, are no better than drugs, physiotherapy or just Father Time. Similarly, roughly two-thirds of excised appendices could have been fixed with antibiotics and many prostates, around 100,000 of which are operated on in Europe each year, are better off with watchful waiting. The list goes on (see Science & technology section).

For patients, needless surgery is a cause of physical pain and, especially in America, financial stress. For stretched health-care systems in ageing rich countries, it is a terrible waste of resources. A recent reduction in referrals for shoulder operations (just one of the six useless orthopaedic procedures) is saving England's National Health Service (NHS) around £100m ($134m) a year, or 1% of its total surgical budget.

The main reason for the persistence of useless procedures is a dearth of clinical data on whether they work. Surgeons liken asking about this to wondering whether parachutes are useful when leaping out of a plane. If the patient gets better, the parachute is assumed to have been a success. Regulators do not require proof that it actually was, as they do with new drugs. Individual surgeons have neither the incentive nor the means to check for themselves. Contrast that with drugmakers, which bankroll big, costly randomised trials in the hope of making lots of money from pills that are proven effective.

Governments can start to correct this failure by running trials themselves. The NHS has already begun doing this, with some success. By testing procedures across many hospitals around Britain, it avoids the charge of impugning the skill of any individual surgeon or, conversely, of missing out the truly skilful. It and other public health-care systems should conduct more such exercises.

Once the results are in, it will be easier for payers, be they public systems or private insurers, to refuse to cover procedures that do not benefit patients. This will not only save money. Surgeons freed from performing unnecessary shoulder and back operations could spend more time on knees, hips and carpal tunnels. In systems where care is rationed, like the NHS, this would have the welcome effect of trimming waiting lists. In July 6.2m patients in England were awaiting non-urgent specialist treatment, a category that includes lots of surgeries.

Unlearning decades of modern medical practice will not come easily to health-care systems. It will be harder still for the surgeons. Like all medics, they believe that they are doing right by their patients. But if your only tool is a scalpel, everything looks ripe for cutting.

Jack the knife

Surgeons must therefore be taught, starting in medical school and then by their mentors in what remains an apprenticeship-based craft, to present patients with a range of options and choose the best one together rather than dictating it from on high. Such "shared decision-making" has become common among clinicians but remains alien to many surgeons. It is in everyone's interest to make it standard. ■

Machine-made prose

The perils of AI writing

Humans should not surrender authorship to large language models

IF *THE ECONOMIST* had just two loyalties, they might well be to good prose and creative destruction. Those seldom previously came into conflict—until artificial-intelligence models began writing. Now, AI text is winning literary awards, occupying op-ed pages and, as we report this week, filling the mouths of politicians. One in ten words spoken in Britain's parliamentary debates, and one in seven in America's House of Representatives, are probably drafted by AI (see Britain section).

When it comes to the written word, no writer is a neutral party. This newspaper has applauded technological progress for nearly two centuries. It would be churlish to turn Luddite only now, once the wolves of automation have turned up at our own door. And yet. Both writers and readers should be wary of passing the pen to AI.

Admittedly, in some sorts of writing an AI takeover would be welcome: customer-service complaints, say, or technical write-ups where clarity is all. What matters in such cases is disclosing the use of AI and making sure that the human being whose name is on the page still takes responsibility. Writers of all sorts would be doing their readers a disservice if they did not use AI models for research, proofreading and, when appropriate, feedback.

Elsewhere, however—in novels, speeches and even news articles—surrendering human authorship would be a mistake. For the time being, the most popular gripe about AI writing is the clumsiness of the prose itself. That complaint rests on shaky foundations. The Luddites grumbled, once, about the poor workmanship of machine-made stockings. But then the stockings got better. Doubtless, AI sentences will, too.

The medium and the message

Any serious case against AI writing must rest, therefore, on the ways that words are not stockings: how they carry meaning and significance beyond what ends up on the page. The act of writing tends to be painful, even for many of those who do it for a living. But much of that pain is really the pain of thinking, of crystallising thoughts in text. Sidestepping that is a sure-fire route to less rigorous, let alone original, human thought. Students who outsource their essays to Claude may lose the habit of reasoning. Politicians who let AI craft their arguments may be less mindful of their consequences.

Another big concern is with the consumers of the written word—or readers, as they are better known. AI writing breaks the expectations of a literate culture. Human text takes longer to write than to read. This offers a certain guarantee if not of quality—the world still swims in dire prose—then at least of effort. Someone, somewhere, thought something was worth saying. Economists call that a costly signal.

Whatever French theorists have to say about the death of the author, readers still want to know that a person wrote the words in front of them. Take poetry. Even a few years ago, when AI was less powerful, researchers were already finding that many people, in blind tests of AI- and human-written poetry, preferred the robo-rhymes. But making sense of a poem relies on the promise that a human wrote it, and thus that it meant something to someone.

Even when AI is not used, it can sully readers' experiences. They may stumble on a turn of phrase that sounds suspiciously machine-made, and give up on reading the rest of the text. Or the proliferation of AI-generated fakery may make them distrust real news. Polluting the information environment like that is what economists call an externality.

Technology will remake many of these norms. AI offers immense opportunities, too, many of which no one can yet fully grasp. Yet liberal societies negotiate these momentous changes not by passively surrendering to technologies, but by adapting to them. The printing press set off religious wars in early-modern Europe. In the 1930s the radio heralded fascism. Few associate either with such high drama today. Societies are grappling with plenty of other technologies that pose risks, such as fattier foods and more potent illegal drugs.

So it would be hubristic to try to chart out exactly how societies ought in future to approach the use of AI in writing. But any writer knows to start with a first draft. This is ours. ■

Letters *Islam in Britain, America and Panama, punctuation, NASA'S latest telescope, French cheese*

Muslims in Britain

The Economist puts forward the argument that the term "Islamism" is a useful way to discuss extremism without treating Muslims collectively as a threat ("Much ado about…something", September 12th). Yet throughout the article, religious observance, conservative attitudes, political organising, Gaza activism, views on sharia and support for violence are brought together as evidence of a wider ideological threat.

"Islamism" is now used so loosely that it can describe both violent authoritarian movements and ordinary Muslims lobbying the government, protesting or standing for election. Muslim political participation is not evidence of "entryism", which requires evidence of an attempt to enter and actively subvert an institution, not to merely contribute to public life.

Muslims are not a single political project. Our faith may inform how we understand poverty, racism, war or inequality, but religious commitment tells us little about somebody's preferred form of government. Sharia, for many Muslims, primarily concerns personal religious and ethical practice. Muslims have spent decades being told to integrate and participate. Yet when they organise effectively, elect Muslim politicians or challenge government policy, participation itself becomes suspicious. Neighbourhoods with significant Muslim populations reflect patterns of migration, family and community networks, housing, employment, deprivation and discrimination, rather than a shared political ideology.

Britain has seen sustained anti-Muslim hatred, ranging from discrimination and threats to mosque attacks, arson and serious physical violence, alongside foiled far-right and neo-Nazi plots to kill Muslims. Recent racist and Islamophobic mob violence in Northern Ireland and stabbing attacks in Glasgow are part of a much wider pattern of hostility and violence affecting Muslim communities across Britain. Extremism and violence should be confronted. But conservative belief, prejudice, coercion and violence are not different degrees of the same phenomenon. Rejecting the vague label of "Islamism" means refusing to treat ordinary Muslim religious and political life as evidence of extremism.

DR NAOMI GREEN
Assistant secretary-general
Muslim Council of Britain
Belfast

America stands by Panama

Your report on America's security co-operation with Panama set up a false choice: either Panama accepts unrestricted foreign access or somehow abandons the Panama Canal ("Welcome to the jungle", August 29th). This is simply not reality. No country has a greater interest in helping Panama strengthen its security, protect the canal and prevent hostile foreign influence than the United States. Under President Donald Trump, that commitment is clear once again.

For years, successive American administrations neglected Panama and our entire hemisphere, meaning drugs, arms, illegal immigrants and even terrorists flowed through our region on their way to America's streets and neighbourhoods. President Trump came into office determined to change that.

The US-Panama relationship is much bigger than a military exercise or jungle-training facility, or any single project or programme. It is about regional sovereignty, security, prosperity and above all, common sense. President Trump is focused on protecting America's security and economic strength. Together, both nations share an obligation to keep the canal out of the hands of any adversary and available for international trade.

That is why preparation matters. That is why co-operation matters. And that is why security cannot rely on diplomatic platitudes. Defending the canal and addressing its vulnerabilities is not an American imposition on Panama. It is a partnership between two sovereign nations with a shared obligation to keep the canal safe, secure and open. America stands with Panama against any threat to the canal.

KEVIN MARINO CABRERA
US ambassador to Panama
Panama City

Couldn't be clearer

An important achievement was overlooked in your piece on the launch of the Nancy Grace Roman Space Telescope ("A cosmic outlook", September 5th). NASA delivered the telescope ahead of schedule and under budget. Hubble, Roman's "original predecessor", was launched seven years behind schedule and, since its official start in 1977, has cost more than $19bn in inflation-adjusted dollars. By comparison, Roman was launched nine months ahead of schedule and its lifecycle cost is approximately $4.3bn.

When Roman sends back its first images to Earth in early 2027, American taxpayers will have many reasons to marvel.

T. MICHAEL SPENCER
Washington, DC

Syntactic ambiguity

"To the point" (August 22nd) underscored the fact that punctuation matters. Consider the lore surrounding Maria Fyodorovna, empress of Russia, whose misplaced comma saved a political prisoner from exile. The intended order, "Pardon impossible, to be sent to Siberia" moved a comma to read, "Pardon, impossible to be sent to Siberia," thus flipping a sentence of strict condemnation to an absolute release.

A lesson I learned as a child to preserve harmony at the family dinner table was always remember the comma in "Let's eat, Grandma." Otherwise, "Let's eat Grandma" would put her on the dinner menu.

MICHAEL BURIK
San Rafael, California

Your review of Florence Hazrat's "On the Mark" brought back memories of a comedy routine by Victor Borge, a Danish-American comedian, which readers can find on YouTube by searching for "Phonetic Punctuation". Borge reads a passage from a book, giving voice to every punctuation mark. It is hilarious—swoosh pop.

DOUGLAS KRAJNOVICH
Merced, California

Avoiding a fromage faux pas

Britain may have more cheeses than France, but it does not have anything like French unwritten rules and etiquette when it comes to slicing them ("Say cheese!", August 15th). You risk social exclusion if you even think about cutting *le nez* from a Brie. Slitting across a Camembert (rather than cutting a *pointe*, like a pizza) invokes utter disdain. And never dip your Tomme de Savoie in mayonnaise or you will be sent to Xaintrie *en toute hâte*.

MIKE COOK
London

→ *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***

Sun, Moon and Five Peaks, 19th century © National Museum of Korea

Beyond the Korean Wave: The art of stewardship

Every civilisation is shaped twice: first by those who create it, then by those who preserve it.

On October 1st, the British Museum will open *Korea*, its first major exhibition dedicated to Korean art and culture in more than four decades. Supported by Samsung, the exhibition spans more than two millennia, it traces the evolution of Korean civilisation through exceptional works of art, from ancient objects to celebrated ceramics and contemporary installations. Drawn from the National Bequest of the Lee Kun-Hee Collection, the exhibition is organised by the British Museum, the National Museum of Korea and the National Museum of Modern and Contemporary Art, Korea.

Its opening comes at a moment when Korea has become one of the world's defining cultural forces. From cinema and music to fashion and design, Seoul, the capital, has become known for innovation not just in technology, but in culture too. Yet *Korea* looks beyond this global fascination to the historical roots of Korean creativity, revealing the artistic traditions that have sustained Korean creativity for centuries.

A legacy continued

Korea is drawn from more than 23,000 works in the Lee Kun-Hee Collection, one of the most significant private collections of Korean art ever assembled. While Mr Lee, Samsung's longtime chairman, helped transform Samsung Electronics into one of the world's leading technology companies, he was also a devoted art collector.

For Mr Lee, preserving cultural heritage was a national duty—a way to safeguard it for future generations. This continued the work of his father Lee Byung-Chull, Samsung's founding chairman, who laid the foundations of the collection, now an important part of Korea's cultural heritage.

After Lee Kun-Hee's death, his family, including his wife, Hong Ra-hee, and his son, Jay Y. Lee, executive chairman of Samsung Electronics, ensured that the collection's next chapter would become its most meaningful. In 2021, the family donated the collection to the Republic of Korea, one of the largest cultural gifts in the nation's history.

What began as a family's private passion is now shared with the world. Once assembled by the family, the collection is now cared for and studied by museums and scholars, and seen by visitors around the world.

A collection shared

London marks the latest chapter in that journey. Following acclaimed exhibitions in Washington DC and Chicago, selected masterpieces from the Lee Kun-Hee Collection now arrive at the British Museum, home to one of the world's greatest collections of human history and culture.

For more than 270 years, the British Museum has brought together the artistic and cultural achievements of civilisations across time and place. *Korea*

Gourd-shaped Ewer with Chrysanthemum Motif, 13th century © National Museum of Korea puts Korean art within that wider story, inviting visitors to encounter its art and trace the continuity of a civilisation whose creative traditions have evolved for more than two millennia.

A conversation across centuries

The overarching framework is chronological, with moments of contemporary connection that link to historic objects.

A celebrated piece of Goryeo celadon—the distinctive jade-green ceramic associated with Korea's Goryeo dynasty (918–1392)—reflects a tradition

Faceted Bottle with Bamboo Design, 18th century © National Museum of Korea

3-X-69#120 by Kim Whanki, 1969 © Whanki Foundation·Whanki Museum

of craftsmanship that continues to influence Korean design. The white porcelain, fired during the succeeding Joseon dynasty (1392–1910), has a luminous, almost translucent, surface that reflects both the refined Confucian aesthetic and the technical skill of the royal kilns.

Clearing After Rain on Mount Inwang, by the Korean landscape painter Jeong Seon, captures a distinctly Korean sense of place, reminding visitors that ideas of identity, memory and landscape have shaped Korean art across centuries.

Associated with the throne of Joseon kings, the *Sun, Moon and Five Peaks* embodies royal authority, cosmic harmony and the ruler's duty to maintain order in the universe. Nearby, modern artists such as Kim Whanki bring the story into the 20th century.

Rather than separating past from present, *Korea* celebrates the cultural continuity between them. Each generation of artists has reinterpreted inherited traditions, creating works that are contemporary while remaining rooted in Korea's artistic heritage.

What we choose to carry forward

For audiences discovering Korea through its contemporary culture, *Korea* offers a chance to discover the artistic traditions that continue to shape the country's creativity. In doing so, the exhibition shows how these traditions still influence Korean culture today.

By sharing the Lee Kun-Hee Collection with the world, the Lee family affirmed a belief that cultural heritage is not simply inherited, but entrusted to each generation to preserve and pass on. Today, museums continue that work, caring for these objects while opening them to new audiences. In doing so, they allow Korea's artistic heritage to be continually reinterpreted and be shared with generations to come.

***Korea* is at the British Museum from October 1st 2026 to January 31st 2027.**

Clearing After Rain on Mount Inwang by Jeong Seon, 1751 © National Museum of Korea

Read more about this exhibit at Britishmuseum.org

BY INVITATION
Piero Cipollone

The future of digital finance rests on public money, not private

IN 2008 AN obscure manifesto introduced a new vision of money that promised to make central banks obsolete. The techno-futurist ambitions of bitcoin's pseudonymous creator, Satoshi Nakamoto, captured the public imagination—and sparked the wild booms and busts of unbacked crypto assets. More recently, the focus has been shifting towards the use of crypto's underlying technologies—tokenisation and distributed ledgers—in mainstream finance. These innovations enable assets such as bonds, shares or deposits to be represented, recorded and transferred as digital packets of data, or tokens. Combining distributed ledgers with tokenisation promises a more efficient way to offer financial services, around the clock and with far fewer intermediaries than today.

This technological shift is beginning to reshape finance. But the effects will be different from the predictions made by Mr Nakamoto. As finance becomes more digital, it will depend more, not less, on a widely trusted public form of money. Central banks are not going to become irrelevant anytime soon. Let me explain why.

Every transaction, from buying a used car to trading bonds, is complete only when the buyer receives the asset they purchased, and the seller receives money they trust. This is called settlement.

If the seller cannot fully rely on the asset they are paid with—if they receive an IOU, for example, or a voucher from a company they have never heard of—they are exposed to the risk that the issuer could default. This risk reduces the convenience of the deal.

Central banks are the only institutions that issue risk-free settlement assets that everyone can trust. This is particularly important for wholesale markets, where banks and other institutions routinely process daily trades worth billions of euros. It is crucial that these trades are made using a universally accepted settlement asset that carries no risk.

Today, transactions are typically concluded between the respective banks of the payer and the payee via an exchange of the safest settlement asset you can think of: central-bank money. Now ask yourself whether this will change because the technology we use to move money is evolving. Tokenisation can automate transactions, remove intermediaries and compress into seconds processes that previously took days. For that transformation to happen, though, investors will require a safe settlement asset. The types of "money" currently available on distributed-ledger technology don't fit the bill: stablecoins and tokenised deposits carry intrinsic credit risk, while bitcoin and other unbacked cryptocurrencies are nobody's liability and subject to wild price swings.

At the European Central Bank (ECB), we draw one fundamental lesson from all this. We want to create the conditions to enable this new technology to unlock safer, more efficient and more resilient markets. Providing central-bank money in tokenised form—a common monetary anchor that offers safety and universal acceptance—is at the centre of this vision.

Throughout history, the most successful financial systems have rested on a common foundation: banks and other financial firms compete with one another but all operate within a system where a public authority—be it a king putting his face on coins or a central banker signing banknotes—guarantees trust in money. We should therefore take the efficiency gains made possible by tokenisation and distributed ledgers, and pair them with the trust, safety and universal acceptance of central-bank money.

This is precisely the idea behind the ECB's Pontes initiative, which went live on September 21st. Pontes connects the platforms on which tokenised assets are issued and traded with the system in which trades are already settled using central-bank money. This gives the next generation of financial assets the same solid foundation that traditional finance is built upon.

And this is only a first step. By 2028 we aim to make tokenised central-bank money directly available on the same blockchain where assets sit, bringing all the advantages of digital-ledger technology, including round-the-clock trading, to the backbone of Europe's financial system. And we are working to create an integrated landscape for digital assets from the outset, with shared standards across borders and platforms, thereby avoiding the fragmentation that has been hobbling Europe's capital markets.

Of course, as in the traditional set-up, there will still be forms of money that complement central-bank money; stablecoins are a case in point. But even the widespread use of these private assets for settlement requires central-bank money in tokenised form: to facilitate convertibility between those assets, to avoid a fragmentation of liquidity and, most importantly, to ensure that one euro is worth one euro whatever form it takes or technology it uses—a principle that central bankers call "singleness of money".

To ensure the efficiency gains from tokenisation are ultimately passed on to the general public, and to issuers and investors, healthy competition is needed. It is important to avoid the emergence of walled gardens that benefit only a few. With this in mind, central banks are promoting shared standards and network interoperability. If we get this right, the cost of financial intermediation, which has remained roughly constant at around 2% since the late 19th century, could finally start falling.

Let's go back to that manifesto from 2008. The early crypto movement may have imagined a world with no central banks, where finance could operate without governments, public institutions or trusted intermediaries. But the financial system now taking shape points to a different destination. The history of digital finance is often presented as an attempt to escape public money, but all along it may have been a search for a better way to use it. ■

Piero Cipollone is a member of the European Central Bank's executive board and chair of the euro-area task-force on the digital euro.

Disappointment guaranteed

BRASÍLIA

Brazil's next president will either be a vengeful nepo-baby or a doddering leftie

FEW COUNTRIES are as lucky as Brazil. It faces no threat of invasion. Its economy is more resilient to Donald Trump's senseless tariffs than almost anywhere else. It enjoys relatively friendly relations with both superpowers. Above all, it is awash with coveted resources.

Yet as Brazil gears up for a general election on October 4th, an old adage, that it is the country of the future and always will be, once again rings true. Instead of capitalising on its advantages, Brazil is all but certain to opt for another four years of polarising gridlock. Neck and neck in the polls are Luiz Inácio Lula da Silva, the 80-year-old incumbent known as Lula, and Flávio Bolsonaro, the eldest son of Jair Bolsonaro, a former populist president serving a 27-year sentence for plotting a coup after losing his bid for re-election in 2022. Think Bernie Sanders versus Donald Trump junior, if the younger Mr Trump had connections to the criminal underworld.

The ballot is an unpopularity contest. Brazilians fear that Lula will run the economy into the ground, whereas choosing Flávio could mean culture wars, environmental havoc and uncomfortably close relations with President Trump's administration. Neither candidate will receive the thumping mandate that is needed to tackle Brazil's fiscal malaise or institutional dysfunction. Hovering over the election is a sordid corruption scandal involving bunga-bunga parties and a playboy banker, which has ensnared the entire political class as well as the powerful Supreme Court, hitherto the last line of defence against the self-serving elite.

The stakes could scarcely be higher. The government is living far beyond its means and its creditors are becoming restive. Mr Trump treats Latin America as a personal playground, abducting Venezuela's president, propping up Argentina's, endorsing like-minded right-wing populists in a series of elections and blowing up boats in the Caribbean. If Brazil, the region's biggest country and a rival centre of gravity, comes into close alignment with America, he will be even more emboldened. To top it all, the winner of the election will appoint four of the 11 justices on Brazil's Supreme Court, shaping the country for a generation.

Green and gold

Brazil is a veritable El Dorado. As the rest of the world wrestles with a shortage of oil and of renewable alternatives, Brazil is overflowing with both. In August Petrobras, the state oil firm, discovered its first crude in the Equatorial Margin, the world's fastest-growing oil province, off the north-eastern coast of South America. That will in time boost its already prodigious production from the "pre-salt" fields off its eastern coast. Fully 89% of Brazil's electricity is supplied by renewables, mostly hydropower. Wind and solar energy have grown so fast the grid often cannot absorb all the output. The surplus green energy could power data centres and make Brazil a hub for the production of low-carbon steel and clean aviation and shipping fuel.

The abundance in energy is matched in food. As recently as the 1970s severe hunger was common, driving millions of migrants, including a young Lula and his seven siblings, from the arid north-east to the mega-cities of the south. Then advances in agricultural research opened the interior up to cattle-ranching and farming. This year Brazil is set to overtake the United States as the world's leading agricultural exporter. It is now king in beef, coffee, cotton, orange juice, soyabeans and sugar cane. Last year Mr Trump had to rescind tariffs he imposed on Brazilian farm goods during Mr Bolsonaro's trial after they helped push up food prices in America.

There is wealth below the soil, too. Brazil boasts the world's second-largest store of rare earths, a group of minerals used in many high-tech goods that are produced and processed almost exclusively by Chinese firms. Brazil could thus be central to Western countries' efforts to secure alternative suppliers. European and American emissaries are "harassing us for deals on rare earths, in a good sense", says a diplomat in Brasília, the capital.

This cornucopia of energy, food and minerals made Brazil the biggest recipient of foreign direct investment among developing countries last year bar China. It attracted $77bn, far ahead of India's $39bn. "Brazil has hard assets that will grow in value in a world of greater geopolitical conflict," says Christopher Garman of Eurasia Group, a consultancy in New York.

Constellation of complaints

Yet grave problems are holding the economy back, despite outsiders' enthusiasm. Real interest rates of 9% are throttling growth. They have spurred a rise in corporate defaults and household indebtedness (see chart 1). Lula faces a similar predicament to Joe Biden, another geriatric leader whose re-election campaign struggled because voters felt gloomy about the economy. Over half of Brazilians say the economy is in a bad or very bad state, a share that has crept up in recent months. Some 9m firms are in default, up from 4m a decade ago, when Brazil was in recession. Debt repayments eat up 30% of average household income according to Tendências, a consultancy in São Paulo, the highest level since it began counting in 2004.

The root of the problem is the government's own heavy borrowing, which is pushing up rates for everyone else. Its debts amount to almost 100% of GDP. The deficit is over 9% of GDP. The government pays a higher share of GDP in interest than any big countries except Egypt and Pakistan. Brazil's history of hyperinflation and recessions makes lenders especially wary. Much of the debt is linked to local interest rates, meaning every time they go up, so do its servicing costs.

Over three terms as president, from 2003 to 2011 and since 2023, Lula has spent lavishly on handouts and subsidised credit. On September 17th, for instance, he increased payments under the government's flagship welfare programme, Bolsa Família, by 15%. Brazilians have happily spent their windfall, which has kept the economy growing and unemployment low. But productivity has stagnated and consumers appear to be slowing down. Economists expect annual growth to average around 1% in 2027 and 2028. Earlier this month Lula offered an alarming solution: "We need to put an end to all this nonsense of running a surplus and maintaining fiscal discipline."

Inevitably, Brazil is falling behind. In 1980 Brazilians were markedly richer than Chileans and Colombians, not to mention Turks and Chinese, when measured by GDP per person adjusted to account for the cost of living. Today Colombians have caught up and the others are all much richer (see chart 2 on next page).

The Bolsonaros, dyed-in-the-wool populists, are little better. Mr Bolsonaro broke a spending limit that had been imposed in 2016 to regain market confidence. To boost his chances of re-election, he tripled the amount of cash handed out under Bolsa Família and almost doubled the number of recipients. Although Flávio pledges fiscal sobriety, in July, when his approval ratings began to trail among women, he promised 70m of them free phones and internet.

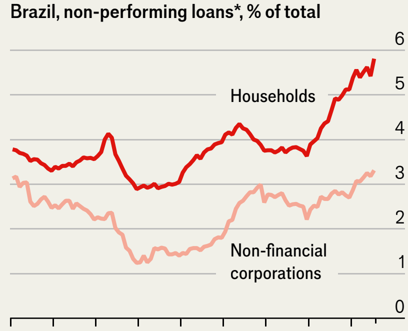
Both candidates will struggle to tackle the interest groups that are driving spending up. One is pensioners, who have managed to lock in constant increases to payouts. The minimum wage in Brazil is adjusted annually based on inflation and GDP growth during the two prior years. Pensions are indexed to the minimum wage, as are disability allowance, unemployment insurance and other benefits. This means that for every increase of one real ($0.19) in the monthly minimum wage, annual public spending rises by 400m reais. This indexation is devouring the federal budget: 90% of it now goes on mandatory spending, mostly pensions. On current trends there will be no money left over for discretionary spending by 2029, precipitating a government shutdown.

This geronto-coddling robs the young of better schools, health care and roads. Brazil spends 10% of GDP on pensions, about the same as Japan, even though its population is far younger. Meanwhile it invests just 18% of GDP, less than half the share of India.

Pampered bureaucrats are another strain on the budget. The constitution says that no official can earn more than Supreme Court judges, who receive $8,865 a month. Yet more than 67,000 civil servants make far more thanks to untaxed housing, transport and other allowances. These "super-salaries", as the local press dubs them, lift the median earnings of judges and public prosecutors to 48 times the national figure. (America's best-paid judge earns just six times the national median wage.) "Brazil has been taken hostage by public servants at the very top," says Guilherme Coelho of Republica.org, a research outfit that looks at waste in government.

Distressing 1

Brazil, non-performing loans*, % of total



Source: Central Bank of Brazil *90-days outstanding

Undeserved tax breaks are a third burden. Corporate-tax loopholes, some of which have been knitted into the constitution, cost a whopping 7% of GDP a year, up from 2% in 2003. "Here companies don't compete for a share of the market, but a share of the government," says an economist. Doctors, lawyers and other professionals also enjoy sweetheart deals.

In theory both candidates are determined to fight entrenched interests. Lula has scrapped some tax breaks and made it harder to create new ones. An adviser to Flávio enthusiastically bashes "parasites" in the state. Daniella Marques, who leads economic policy for his campaign, has praised Javier Milei, Argentina's libertarian president, as "a great example". But when pressed, his team offers few specifics.

In practice the winner will struggle to rein in such spending. Pension reform is as politically difficult in Brazil as it is everywhere else. Over the past decade a series of weak presidents has ceded control of a quarter of discretionary spending to members of Congress, to dole out in their districts with little oversight. Much of the money has ended up in friends' pockets rather than in local schools or clinics.

Over the past four years Lula has been unable to restore order. The next parliament is likely to be dominated by right-wing parties, which could make it even harder for him to govern. Flávio, too, has failed to win over many of them. To advance his agenda, either man would have to keep buying off Congress.

Congress is not the only institution with questionable motives. In 2023 the Supreme Court allowed judges to rule in cases that involve firms or individuals with connections to their own relatives. Eight of Brazil's ten current Supreme Court justices have relatives working for law firms representing cases before the court. Unscrupulous clients hire them in the hope that they will receive special treatment.

The ubiquity of influence-peddling has become clear through the collapse of Banco Master, a fraud-riddled lender. Its boss, Daniel Vorcaro, threw lavish parties for politicians and judges, flying in sex workers from Russia, Venezuela and elsewhere. He had a preference for foreign prostitutes because they could not understand their clients' conversations. At a Halloween party thrown at a nightclub called "Madame Satan", 120 women attended alongside only 20 men, mostly politicians. "Davi's going crazy asking if the Swiss girls are coming" read a text message between the banker and his fixer, in an apparent reference to Davi Alcolumbre, the head of Congress (he denies this).

After Mr Vorcaro was arrested trying to flee on a private jet last November, federal police worked their way through his eight mobile phones. Almost half the Supreme Court had links to him, it turns out. Messages suggest that Mr Vorcaro paid for an escort for one justice, bought a $4m stake in a hotel owned by another and hired the wife and sons of two further judges on lavish but vague contracts.

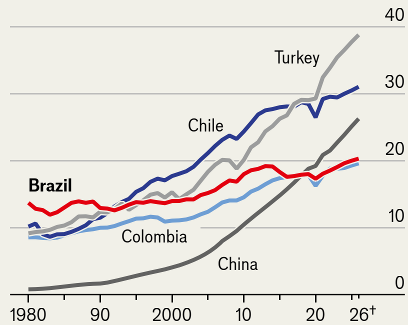
Brazil's institutions have thus arrived at a point of mutually assured destruction. Only the Supreme Court can investigate politicians for crimes, such as corruption. And only politicians can impeach Supreme Court justices, which they are promising to do. Congressmen have an incentive to target judges investigating them, while judges have an incentive to target congressmen who want to impeach them. That the Banco Master scandal involves the entire elite means that a backroom deal could eventually let everybody off.

Disorder; no progress

Neither front-runner can tackle the rot. Flávio is part of it. He claimed never to have met Mr Vorcaro, which made the leak in May of a recording of the two of them speaking embarrassing, especially because he called the banker "my brother" and asked for $25m to pay for a film about his father. Almost $11m was forthcoming, most of which ended up in a bank account linked to Flávio's actual brother, Eduardo, who lives in Texas. Flávio has also been investigated for allegedly pocketing the salaries of fake workers while serving on Rio's local council (he denies it) and for his links to local criminals. A particularly infamous contact was Adriano da Nóbrega, a former police captain who went on to run a death squad. Flávio nominated Nóbrega for a medal after he was jailed for homicide and gave jobs to his wife and mother. (He says he was unaware they were on his payroll.)

They go high, we go low 2

GDP per person at PPP*, $'000, 2021 prices



Source: IMF *Purchasing-power parity †Forecast

Meanwhile, though Lula has not been implicated in the Banco Master case, some of his allies have. His party continues to be tarnished by previous corruption scandals and his son is being investigated for influence-peddling.

The campaign has been petty and insubstantial. Flávio's main proposal is to pardon his father and impeach the judges who jailed him. This month the former head of the air force, Carlos Baptista Junior, published a book detailing how Mr Bolsonaro tried to persuade him and the other military chiefs to stage a coup, floating ideas about how to annul the election he had just lost. Mr Bolsonaro dropped the plan only after the army chief warned him, "If you do that, I'll have to arrest you." Like his father, Flávio has cast doubt on Brazil's voting machines, falsely claiming the same kind were used in a stolen election in Venezuela—a complete fabrication. It is unclear if he would accept a Lula victory.

Flávio's other proposals are fluff. He says he will decree that "Brazil belongs to the Lord Jesus Christ" and chemically castrate rapists. Victory would spell a close alignment with Mr Trump. Flávio and his family have lobbied the Trump administration to impose tariffs and sanctions on Mr Bolsonaro's enemies. At campaign rallies, supporters have paraded with American flags and inflatable effigies of Mr Trump holding Lula by the scruff.

Flávio appears willing to acquiesce to America's expansive demands over rare earths. The White House wants Brazil to notify it before the sale of any firms or assets involving critical minerals and to limit investment by "foreign entities of concern", in effect giving the United States a veto over the use of Brazil's minerals. Nevertheless Faria Lima, Brazil's equivalent of Wall Street, is cautiously lining up behind Flávio in the hope that he will make good on his talk of spending cuts.

Lula, for his part, talks about investing in defence and artificial intelligence. He has a solid record of reducing deforestation. He has championed laws to spur investment in data centres and in rare earths, albeit with heavy state involvement. "We want to build a supply chain with value-added, not simply export raw materials in a colonial way, leaving behind only holes in the ground," says Guilherme Boulos, a minister working on Lula's campaign.

Yet there is no money to pay for Lula's ideas and he does not have a credible plan to right the government's finances. At rallies he rambles on for hours, mainly about his past glories and life-story. His much younger wife has taken to posting videos of him working out to prove he is fit. In public he wears a Panama hat to hide scars from the removal of a mole and an operation after a fall in the bathtub.

Brazil is not a lost cause. Even as politics descends into debauched scandal, a robust civil society, thriving free press and independent national police force are holding the powerful to account. "At least in Brazil corruption investigations actually happen," notes Celso Rocha de Barros, an academic. Journalists in India and Turkey may look on with envy.

Brazil has vanquished hunger, hyperinflation, military rule and a coup attempt in just a few decades. Despite dysfunction, it muddles through. The next presidential term, however, is likely to be a shambles. Neither leading candidate seems willing to fix the government's finances. Neither will have the backing he needs in Congress to institute meaningful reforms. Neither Congress itself nor the courts can fix Brazil's institutional rot, since they are both implicated in it. Things will get worse before they get better. ■

United States

Midterm elections

Rough waters

KODIAK

A contentious battle in Alaska may determine control of the Senate

Alaska is an unusual state with unusual politics. It is both tiny and enormous, with fewer than 740,000 people living in a territory more than twice the size of Texas. It is staunchly Republican yet politically open. The last Democratic presidential candidate to win Alaskans' vote was Lyndon Johnson, in 1964, but the state prizes moderation. Now America's 49th state is one of a handful that will determine if Democrats win the Senate.

The Senate campaign, between Dan Sullivan, a Republican incumbent, and Mary Peltola, a former Democratic congresswoman, is a toss-up, and may become more contentious still. On September 23rd the *New York Times* published an investigation about Ms Peltola, alleging chaotic mismanagement and mistreatment of her staff. Her campaign denies any pattern of abuse. The allegations are particularly jarring for a candidate whose appeal to voters was built, in large part, on her charisma and approachability.

Democrats hope that Alaska's unique political culture and the outsized impact of Donald Trump's policies on the state will help to bolster Ms Peltola's chances. But much depends on Ms Peltola, too.

The Economist's forecast model, which does not yet account for the *Times* report, puts her odds of victory at 56%. That she has even a chance is a reminder of how, in a partisan era, Alaska's politics have remained remarkably fluid. In 2010 Lisa Murkowski, Alaska's other Republican senator and a centrist, lost to a Tea Party candidate in the primary, then won the first write-in Senate campaign in more than 50 years. The ruling majority in the statehouse is a "tripartisan" coalition of Democrats, Republicans and non-partisans. Alaska is the only state that combines a non-partisan primary with ranked-choice voting. "When it comes down to it, parties really don't play an important role," says Gary Stevens, the state Senate president who worked alongside Ms Peltola in the legislature in the early aughts.

Ms Peltola is a product of this environment. A native Alaskan who captained her first fishing boat at 14, she won statewide office in 2022, when she beat Sarah Palin, a former governor, to represent Alaska in Congress. Ms Peltola and Ms Murkowski endorsed each other that year. Mr Sullivan's campaign ads try to portray Ms Peltola as a puppet for "Lower 48 liberals", but she often bucks her party—the National Rifle Association supported her in 2024.

She is also happy, on occasion, to side ▸▸

→ ALSO IN THIS SECTION

with the president. Mr Sullivan argues that Ms Peltola and a Democratic Senate majority would restrict leasing and drilling in the Arctic. "My opponent would ally herself with the anti-Alaska energy groups in Congress, who will do what they always do: shut down Alaska energy," he said in a debate on Kodiak Island on September 12th. Ms Peltola has released a pro-oil ad in which she promises that she will "work with Donald Trump to unlock more land and more development".

On other issues, Ms Peltola criticises the effect of Mr Trump's policies on Alaska, if not Mr Trump himself. The president carried the state by 13 points in 2024, so Ms Peltola must win over many Trump voters if she is to eke out a victory.

Despite the state's oil riches, Alaskans are particularly affected by pricey fuel, which raises the cost of heating rural villages, transporting goods and people over long distances and, of course, fishing. Because Kodiak Island is a fishing hub, the entire debate was devoted to fisheries issues. Fuel "is the number one cost for all fishermen", Ms Peltola told the crowd. "We are being priced out of petroleum, and we're being priced out of our lives in Alaska because of the war in Iran." In the state's survey of Alaska's rural communities this summer, average petrol costs were $7.56, almost twice the national average.

Alaskans have also been particularly affected by the Department of Government Efficiency's dismantling of the federal bureaucracy. The Alaska Department of Labour and Workforce Development reckons the state lost nearly 5% of its federal workforce in 2025, a higher share than any state other than Maryland and New Mexico. Federal employment in Alaska is now at its lowest level in over 35 years.

Take fishing, again. Officials and fishermen rely on data from the National Oceanic and Atmospheric Administration (NOAA) to set seasonal fishing quotas, track fish stocks and monitor the weather. NOAA's lab on the Kodiak Archipelago, which surveys crab in the Bering Sea, lost a third of its scientists last year to firings, buyouts or early retirements, according to Mike Litzow, its former director. The administration's hostility towards the federal bureaucracy also, ironically, increased the lab's administrative burdens. To get on the boat to survey crab "requires something like 12 layers of approval", Mr Litzow adds. Every purchase made with a government credit card was subject to scrutiny. "Someone who worked for me had a credit-card packet with 15 purchases for the month, and the packet was 385 pages of documentation," he recalls.

Frustration with high fuel prices or unreliable weather data, the Peltola campaign hopes, will overshadow any reports of mismanagement or outbursts, though the race

Democrats' boots on the ground

is close enough that negative news may have an impact. In such a big state, with many remote communities, Kodiak's fishermen were pleased to see their candidates show up to seek their votes. Several fishermen at the debate who identified as Republican said they view Ms Peltola as one of them. The rubber boots she wore on stage probably didn't hurt. ■

Education funding

It's not about the money

Schools for the poor are not poor schools

THE "WOKE", race-and-gender-focused ideology that peaked in 2020 had no leader, but Nikole Hannah-Jones has a strong claim to be its defining intellectual. A journalist for the *New York Times Magazine*, she wrote "The 1619 Project", a revisionist history of America centred on slavery, and won plaudits for a story in 2016 about sending her daughter to a school with mostly poor, non-white pupils. Her latest article, published on September 20th, is a partial mea culpa that has triggered a torrent of anti-woke schadenfreude. It recounts her daughter's subsequent ordeal of absent or neglectful teachers and rowdy classmates, and rage at the sacrifice of her education in the vain hope of fixing a broken system one child at a time.

Yet even as Ms Hannah-Jones takes personal responsibility for this "betrayal" of her child, she says little about the progressive-backed education policies that arguably contributed to the dysfunction of the schools her daughter attended. Moreover, the main explanation she provides for the schools' failings is decades out of date.

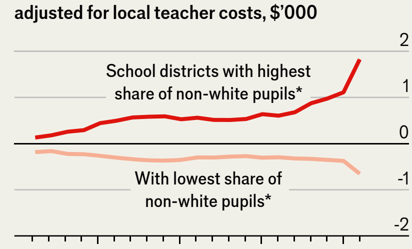
Ms Hannah-Jones cites a study from 2019 by EdBuild, an advocacy group, reporting that "nationally, schools in predominantly non-white districts receive $23 billion less in annual funding than their heavily white counterparts". From this she concludes that such schools' poor test scores merely "reflect" this financial "disadvantage". She could hardly have picked a worse example to support this claim than her daughter's own Public School (PS) 307 in New York, which spent $52,349 per pupil in 2024-25, making it one of the best-funded schools in one of America's highest-spending districts. And PS 307 is no exception, but rather an extreme example of the national pattern: state schools with the lowest shares of white pupils actually receive the most funding.

The belief that poor areas have poorly funded schools is grounded in history. In 1940, 68% of school budgets came from local sources such as property taxes. But a series of redistributive reforms starting in the 1960s supplemented these funds with state dollars and, to a lesser extent, federal money largely allocated to poor districts (and not counted in EdBuild's study). According to a recent study by the Brookings Institution, a think-tank, the poorest and least-white quintiles of school districts had the greatest per-pupil spending as early as 1976-77. This pattern still held in 2020-21, even after accounting for the higher prevailing wages in heavily non-white districts that tend to be in big cities, and subsequently strengthened thanks to Democrats' covid-era fiscal-stimulus package. *The Economist*'s analysis finds that in 2024, the average black pupil's school district spent 3.5% more per pupil after adjusting for wage differentials than those of their white counterparts. The corresponding premium for Hispanic pupils was 0.9%.

This spending, however, has not yielded equal learning. In national testing of 13-to-14-year-olds in reading and maths in

Miseducation

US, spending per pupil relative to state average, adjusted for local teacher costs, $'000



*Districts grouped by share of non-white enrolment; each group contains 20% of pupils nationally
Source: "School spending equity since 1976", by S. Reber et al., Brookings Institution, June 2026

2024, the average white pupil scored in the 58th percentile, compared with the 32nd for the average black exam-taker. Some of this gap stems from black pupils being more likely to be poor, and therefore more likely to have greater educational needs, which may justify a more progressive funding distribution. Schools like PS 307 often have more children with learning disabilities, and they need more specialists to help pupils with difficult home environments and those who are learning English.

However, education scholars also highlight a host of problems beyond money, most of which are apparent in Ms Hannah-Jones's account. Unionised teachers are paid largely based on seniority, rather than on performance or on the difficulty of their school environments. As a result, teachers in poor areas tend to flee to schools in richer areas with fewer disciplinary issues, saddling their former schools with a revolving door of inexperienced teachers. Teachers who frequently miss work or whose pupils fare poorly remain in classrooms because they are hard to replace. Promoting children to higher grades despite low scores on standardised tests—which Ms Hannah-Jones has said measure privilege rather than intelligence or school quality—makes pupils unaware that they have failed to master material. And failing to discipline disruptive children or remove them from classrooms impedes all of their classmates' efforts to learn.

Many of Ms Hannah-Jones's critics still give her credit for her public reckoning. But the main lesson from her parable is not that every parent with the means to escape such schools should do so. It is to heed the message of the principal of her daughter's second school: that "lower[ing] expectations" for non-white pupils is "racism under the guise of anti-racism". ■

The news

Full-court press

WASHINGTON, DC

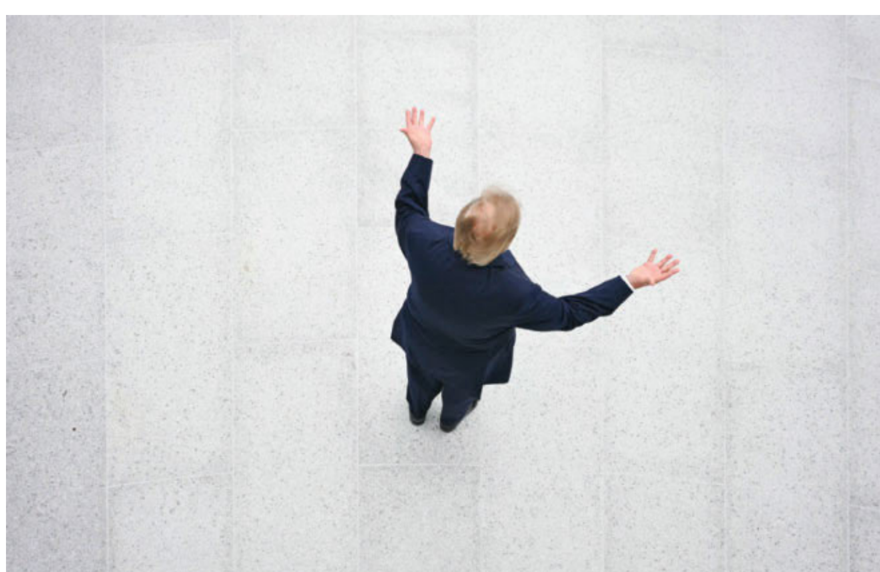
Donald Trump's latest brawl with the media may fail, but his fight is taking a toll

HE WAS uncharacteristically silent as he cut the ribbon on a new helipad at the White House on September 21st. Donald Trump's mouth moved, but viewers heard nothing. The press "pool" that normally relays the president's public remarks was absent. Mr Trump had been muted by his latest skirmish with the press.

The dispute began days earlier, when Mr Trump announced that he would ban CNN and MS NOW, two cable-news networks, and Politico, a news outlet, from the White House. There was "no reason", he said later. "It's really just cumulative stories over the last two years. You get sick of it." In response, America's five big television networks—ABC, CBS, NBC, CNN and Fox News—said they would boycott some coverage of Mr Trump. Those five comprise the White House's television pool, taking turns filming the president and sharing the footage with other news organisations.

The relationship between the press and the presidency is inherently fractious. Even so, excluding outlets because of their coverage constitutes "viewpoint discrimination", which is barred by the First Amendment. On September 24th a federal judge said the administration had not followed due process and ordered it to temporarily lift the ban on the outlets.

In this battle, as in others, Mr Trump craves victory, but merely starting the fight has an impact. Last year, after the Pentagon imposed new restrictions on journalists, much of its traditional press corps left and was replaced by influencers and once-fringe outlets. In March a federal judge deemed the restrictions unconstitutional. Courts are also weighing a dispute between Mr Trump and the Associated Press, which was barred from some events and Air Force One after refusing to call the Gulf of Mexico the "Gulf of America".



Is anybody listening?

The president himself has sued almost a dozen journalists and outlets since he first took office. Most cases have been dismissed, but two were settled on terms favourable to him. ABC agreed to pay $15m towards Mr Trump's presidential library, plus $1m in legal fees, and expressed "regret" over remarks by George Stephanopoulos, a presenter. Paramount Skydance, CBS's owner, agreed to pay $16m towards the library to settle another case. Brendan Carr, chairman of the Federal Communications Commission, has threatened broadcasters with scrutiny of their licences over programming Mr Trump dislikes.

Fears about the politicisation of news helped prompt a dozen Democratic state attorneys-general to oppose Paramount's takeover of Warner Bros Discovery, which owns CNN. Paramount is run by David Ellison, who reportedly assured administration officials that he would make "sweeping changes" to CNN. He had already installed Bari Weiss, a critic of the left, as editor-in-chief of CBS News. On September 21st the attorneys-general allowed the deal to proceed, with one of the conditions being that Paramount appoint an "editorial independence" board for CNN and CBS.

The point of Mr Trump's campaign is not necessarily to win each fight but to wear the enemy down. Americans' trust in the news is fading, with many relying on social media for information. Mr Trump's ally Elon Musk owns X, one of the biggest platforms, and the president offers rambling monologues on his own Truth Social site. A new poll from the Pew Research Centre finds that Americans broadly support a free press, but most say the government should be able to restrict it in certain circumstances, such as if it contains inaccuracies. To Mr Trump, that may sound like an invitation to wield a bigger gag. ■

Surveillance

What the Flock?

Licence-plate readers are angering Americans

AMERICANS DO NOT like to be watched. Neither, it seems, do the bosses of companies that make surveillance technology. Josh Hawley, a Republican senator from Missouri, invited several of them to testify to a subcommittee about their products on September 23rd, amid mounting privacy concerns. All declined.

His request follows months of backlash against Flock Safety, America's largest operator of automatic licence-plate readers (ALPRs). Flock's cameras use AI to track vehicles, aiding police investigations. But officers have also misused them. The share of Americans opposed to ALPRs in their community has risen from 33% to 46% in under a year, according to YouGov, a pollster. Lawmakers from both parties are mulling bills to limit the technology.

ALPRs are not new: local governments have long used them to collect tolls and enforce traffic laws. More recently, activists on the left protested against their use by federal immigration authorities. Donald Trump, on the other hand, says he likes Flock because it helps law enforcement. Yet the uproar has escalated quickly, echoing the outcry over data centres. ALPRs and data centres have both scaled up quickly and become symbols of anxiety about AI.

Flock, which sells cameras much cheaper than its competitors', boasts more than 120,000 across the country, each generating millions of images. Owners can share this data with nearby police departments and Flock's nationwide database, allowing officers to search different cities or states. AI can extract other details about a vehicle, such as its colour, broadening searches beyond licence plates.

Police say this helps them solve crimes such as theft or abductions. Flock claims to have aided 10,000 missing-person cases last year. But its network of ALPRs "goes far beyond what people previously understood the tools to be", argues Melissa Owen of the National Association of Criminal Defence Lawyers. Cops do not need warrants to look up plates, and state laws vary on how officers log searches, how long data can be stored and whether footage can be sent to other states.

Officers have been caught stalking ex-partners and tracking spouses. Software errors have led to innocent drivers being stopped. A lack of transparency has added to the furore. The Electronic Frontier Foundation (EFF), a digital-rights group, analysed search logs and found officers entering nonsensical reasons for looking up plates, including "LOL" and "sexy". (Flock has since added a drop-down menu of categories.) The EFF is one of several organisations suing cities for allegedly running thousands of unnecessary searches. The company says it has tightened requirements for searching its database.

However, the uproar has spilled into the midterms. Seth Bodnar, an independent running for the Senate in Montana, recently filmed himself shooting a camera with a shotgun. The backlash is producing more substantive results, too. Greg Abbott, running to be re-elected as Texas's governor, has paused state funding for Flock. Over 250 cities, towns and schools ended their contracts with Flock in August and September, according to a tracker by Secure Justice, an anti-surveillance group. In the same two months last year it was five. ■

Energy politics

Fuelish ideas

NEW YORK

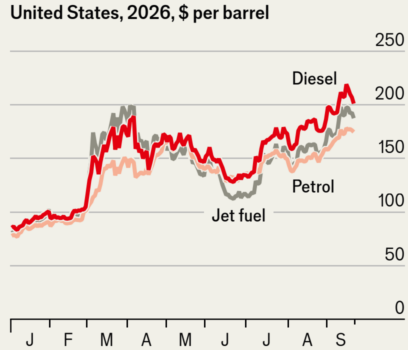
A nonsensical proposal to ban diesel exports

WHEN VOTERS are mad about a problem—particularly before an election—politicians usually try to solve it. Ideally, their proposed fix would be wise. But sometimes the solution that seems politically effective is also substantively nonsensical. Such is the case with diesel.

The average price of diesel in America topped a record $6.50 a gallon on September 20th. This is painful for the Americans who depend on the fuel. And it is a political nightmare for Republican lawmakers, who already face public anger over the war in Iran and costly petrol. A growing number of them are pushing for a ban on diesel exports, including Mike Rogers, a Republican running for Senate in Michigan, and Dan Sullivan, a Republican senator facing a tough re-election battle in Alaska. On September 22nd Donald Trump said he was considering the idea. The next day Politico, a news outlet, reported that the administration was preparing a 90-day restriction, though the White House subsequently denied the report. If such a restriction materialises, it would do little to fix the problem—and could create new ones.

Pumped up

United States, 2026, $ per barrel



Source: Argus Media

To grasp why an export ban would be unwise, consider what Mr Trump's own energy secretary, Chris Wright, had to say at an event organised by *The Economist* on September 23rd. "The blunt tool of banning diesel exports definitely doesn't work," he explained. "That same refinery that produces diesel also produces gasoline and jet fuel, so if you can't export the diesel that comes out of our refineries, you run out of places to store it, and you have to reduce US refining, which would put upward pressure on gasoline prices and jet-fuel prices."

This poses a few challenges for Republicans. To start, detailed explanations of how refineries work do not make for compelling campaign ads. But the problem of pricey diesel may get even worse. Demand for the fuel is particularly inelastic. Unlike petrol, which is often burned on discretionary car journeys, diesel is used mainly for vital economic activities, powering tractors, lorries, excavators and more. And it just so happens that diesel use is particularly high in states with important Senate races, including Alaska and Iowa.

The supply of diesel may continue to be constrained because, as one trader puts it, "today the scarcest commodity is not crude, it is refining capacity." The war with Iran has severely disrupted Gulf refining and diesel shipments. The war in Ukraine is also disproportionately affecting diesel, long an important Russian export, as Ukraine has escalated its bombing campaign against Russian refineries. Combined, diesel shipments from Russia and the Gulf have fallen by 75% since last year. They are unlikely to rebound quickly.

Little wonder, then, that politicians are mulling a ban, even as the administration debates how far to go and the oil industry lobbies hard against it. Mr Wright suggested the government may seek to reduce diesel exports by working with companies in a "simpler, voluntary, co-operative fashion", rather than banning them outright.

An actual ban would create the issues outlined by Mr Wright, putting upward pressure on petrol prices. It would cause other headaches, too, by creating new doubts about America's reliability as a supplier of energy exports and destination for investment. But those other problems are longer-term, while the midterms are less than six weeks away. ■

Renewable energy

Hot air

NEW YORK

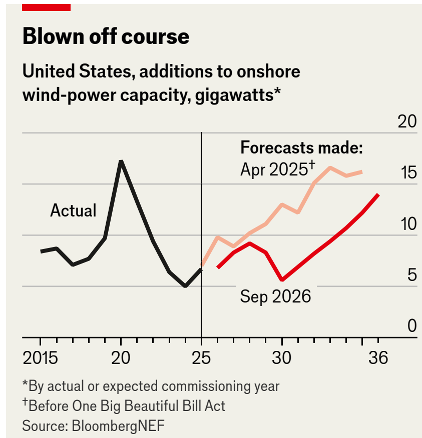
Disdain for wind is not killing it, yet

CLIMATE WEEK NYC is held alongside the UN General Assembly each September, when leaders gather in New York to discuss some of the world's most intractable challenges. For Donald Trump, climate change isn't on the list. He mentioned it in his speech to the United Nations on September 22nd only to characterise it as a hoax; in last year's address, he called it the "greatest con job ever perpetrated on the world". Policymakers have long discussed how governments can unleash renewable energy; Mr Trump is now providing a study of how to restrain it.

"My goal", he said at the start of this year, "is to not let any windmill be built." Some tactics have been expected, such as the Republican tax law that ended Biden-era tax credits for wind and solar farms. Other methods have been more creative, such as paying wind developers to abandon offshore projects, a practice over which the attorneys-general of California and New York filed suit on September 22nd. Mr Trump has not succeeded in halting all renewable development, but he is slowing it down.

The president's main problems with wind and solar were summarised in an executive order last year titled "Ending Market Distorting Subsidies for Unreliable, Foreign-Controlled Energy Sources". It is correct that wind and solar produce intermittent power, depend on foreign supply-chains and benefit from public support. Yet by the government's own figures the "levelised" cost of electricity—ie, over an asset's lifespan—from onshore wind and solar is now lower than that of natural gas, and there would be ways to manage intermittency (through energy storage and complementary sources) and foreign dependence (through trade deals with allies). Mr Trump is unconvinced. Chris Wright, his energy secretary, emphasises the need for consistent power, of the kind generated by natural gas and coal. "If you produce electricity only some of the time, and we don't know when," Mr Wright argued on September 23rd, "that's not firm electric generation."

Installations of utility-scale solar have dipped, in part due to permitting bottlenecks and shifting rules on imported equipment—last year's tax law included provisions to determine if a project was supported by a "prohibited foreign entity". But the president harbours a specific disdain for wind turbines. He blames them for killing birds, slashing property values, causing cancer and generally being "inappropriate" and "pathetic". Offshore wind has proven particularly vulnerable, due to its high cost of $119 per megawatt hour (MWh), compared with $77 for natural gas, as well as lengthy timelines and dependence on federal permitting.



On Mr Trump's first day of his second term, he issued a memorandum temporarily halting permits for wind deployment on federal land and waters, which included all sites appropriate for offshore wind. Then, in December, the Department of the Interior suspended the leases for five offshore wind projects that had received permits during the presidency of Joe Biden.

Judges have allowed construction to resume, but beyond those five, says Harrison Sholler of BloombergNEF, a data outfit, no more are expected to come online by 2035. So far this year the government has paid about $3.9bn to firms to abandon their planned projects offshore, using taxpayer money supposed to settle lawsuits against the government. Inflation and high interest rates had already made those projects less attractive; uncertainty around state support made matters worse. Patrick Pouyanné of TotalEnergies, the first to strike a deal, explained the effects of shifting policy on long-term offshore projects: "it doesn't work."

Onshore wind is cheaper, at $57/MWh, and has fared better. There was a surge in building this year, as developers scurried to claim tax credits before they expired. But BloombergNEF has lowered its forecast for 2029 by 25% compared with its outlook from April 2025. On top of expiring tax credits and the pause on federal permitting, developers are now grappling with delays from the Department of War (DOW). Wind projects have long required approval from the Department of Defence, now the DOW, to ensure that they do not interfere with radar or flight paths. But from August 2025, the DOW gradually stopped reviewing proposals. Since then, says Jason Grumet of the American Clean Power Association, a trade group, "they've just turned off the lights and pulled the blinds. They're cancelling meetings." Over 150 projects are caught in the bottleneck, which the DOW argues is justified on national-security grounds.

As Mr Trump continues to clamp down on renewables, two forces may lift them up. One judge has ordered the administration to resume reviews of projects delayed by the DOW, and another has indicated that the restriction of permits on federal lands may be illegal. More important, there is booming demand for power. "There's a certain point", argues Mr Grumet, "at which the price increases and what we fear will be energy-adequacy challenges will force any administration to get behind an all-of-the-above policy." ■

The president's least favourite thing

LEXINGTON
Split decision

What a race in Maine will mean for common sense in the Senate

BEING A UNITED STATES senator can be a cushy gig, if you hail from a state where your party has the decisive advantage and you like to talk a lot. Cast your votes as the leader of your caucus directs; don't leave any space for a primary challenger to your right (if you are a Republican) or to your left (if you are a Democrat); and materialise regularly on Fox News or MS NOW, respectively, to rant about the other party. Then sit back, watch the donors' dollars roll in, and look forward to your golden years in what was once known as the world's greatest deliberative body, and has become its finest nursing home.

Some senators are inclined to work a lot harder than that, of course. And at least one, Susan Collins, a Republican, has had no choice. Since 1997 she has represented a state, Maine, that has not voted for a Republican for president since 1988. She is among the last of a vanishing breed who share their state with a senator from a different party, in her case Angus King, an independent who caucuses with the Democrats. So-called split delegations were once common. At least 20 states, and as many as 27, had split delegations from 1969 through to 1994, and as recently as 2013 there were 18 such odd couples, who generally learned to collaborate in their state's interest and sometimes even the country's. Now there are just four, the fewest since direct election of senators began in 1913—and that includes Vermont, where the split is between Peter Welch, a Democrat, and Bernie Sanders, who, as an independent, is a Democrat but only more so.

This is a harder-to-fix result and cause of polarisation than the gerrymandering of House seats. Instead of politicians picking their voters by sorting them into congenial districts, Americans are sorting themselves into states by party and, as all politics has become national, splitting their votes less often. Ms Collins has bucked the trend through assiduous constituent service, bringing federal projects to the state and setting the all-time record for most votes cast—more than 10,000—without missing a roll call.

The hardest part of being a senator like her is picking her own path through all those votes, demonstrating enough independence to appeal to centrists and even some Democrats without alienating her Republican base. An analysis by the *Bangor Daily News* in August found that Ms Collins over her career had cast the decisive vote against her own party infrequently, yet more often than any other senator of either party, including to convict Donald Trump after the attack on the Capitol in 2021. For 13 years she has ranked first among Republican senators in the annual "bipartisan index" kept by the Lugar Centre, a non-profit, and Georgetown University's public-policy school.

Now, as seems true every six years, Ms Collins is in the toughest race of her career. Though a supporter of abortion rights, she voted to confirm Brett Kavanaugh to the Supreme Court, saying she believed he would treat *Roe v Wade* as "settled law". His subsequent vote to strike it down sealed the indictment one hears often from Democrats in Maine—that Ms Collins voices "concerns" but does not stand up to Mr Trump when it counts. Add to her liabilities record diesel prices in one of America's most rural states and a trade war with that state's top international trading partner, Canada. Then, on September 22nd, ProPublica, an investigative news outlet, commanded headlines in Maine with a report detailing a scheme several years ago by a defence contractor to trade campaign contributions to Ms Collins for federal funds. Ms Collins's office denied any wrongdoing and said it returned the contributions. "These issues were resolved in 2021," her office said.

The report reinforced the campaign message of her Democratic adversary, Troy Jackson. "You shouldn't be able to buy the government based on your wallet," he declared during an event in Scarborough the evening before the ProPublica story appeared. Mr Jackson is campaigning on the populist economic message Democrats across the country have embraced this cycle, condemning a rigged system, high prices and Elon Musk. But he is unusual in having the working-class credentials in which the party is desperate to drape itself. In its communications, his campaign invariably precedes his full name with "Fifth-generation logger", the way one might title a person "Doctor" or "Prime minister".

Woodsman, spare that trope!

Yet Mr Jackson has liabilities, too, including a tendency to mumble and meander on the stump. Democrats were deflated by the collapse amid scandal of their previous nominee, Graham Platner, an electrifying candidate. "He had talent, he was clearly going to have an impact," says one Democrat, surveying the crowd at the Scarborough event and finding it wanting. "If it was Graham Platner, you wouldn't be able to get in." (He asked that his name not be used because he knows Ms Collins personally.) Some Democrats fear Mr Jackson may carry authenticity too far for the college-educated professionals who are the party's base. "People think to themselves, 'Christ, fifth generation?'" says one Democratic insider. "'Couldn't the fourth or fifth have gotten out of logging?'" Unlike Mr Platner, Mr Jackson is less clearly an anti-establishment choice, having served in the state legislature for 20 years.

Despite trailing in the polls in 2020, as she is now, Ms Collins won that race by more than eight points even as Mr Trump lost Maine by more than nine. It will take a mighty Democratic wave to put an end to Maine's split delegation, and with it one of the last moderating Republican influences in the Senate. On the other hand, a wave that big might also split delegations anew in such Republican states as Ohio, Iowa, Kansas, Texas and Alaska, creating a new moderating force within the Democratic Party—and, with it, more motivation for the hard work of bipartisanship in the Senate. One can hope. ■

The Americas

El Salvador

The dictator's laboratory

SAN SALVADOR

After security, President Nayib Bukele is searching for more successes

Nayib Bukele, El Salvador's youthful president, is image-conscious. Not wanting to be seen as a run-of-the-mill dictator, he markets himself not just as the saviour of his country of 6m people, but the builder of a lab—often powered by technology—from which others can learn.

An election is a few months away, in February, but Mr Bukele has little to fear from the vote. Since Salvadorans first put him into office seven years ago he has packed the constitutional court with allies, abolished presidential term limits, reduced the number of municipalities from 262 to 44, shrunk the legislature from 84 seats to 60 and redrawn electoral districts—all to his benefit. Plus he remains genuinely popular. But he would rather face voters on the back of fresh successes. The president wants to be seen as "a guru on transforming societies", says one analyst in El Salvador, who asked not to be named.

The targets of this transformation are education and health care. The deployment of artificial intelligence is key. Last year Mr Bukele launched a pilot in 171 schools using Grok, a chatbot made by Elon Musk's xAI, to help teach children. Grok acts as a tutor in maths, science and reading, working at the pupil's own pace. A teacher supervises. Similar experiments are under way elsewhere—Colombia has piloted Meta's chatbots in rural areas—but officials say El Salvador's is the first attempt at a full national roll-out. Mr Bukele is expanding the scheme.

Health is getting a similar treatment. In November, this time working with Google, Mr Bukele launched DoctorSV, an app through which you can reach a doctor at the touch of a button. Assisted by AI as a first filter, these doctors diagnose ailments, prescribe drugs and order and analyse tests without charge. The government says 1.5m Salvadorans have registered and 2m electronic prescriptions have been issued. Mr Bukele boasts that it will become "the best medical system in the world".

→ ALSO IN THIS SECTION

28 When Donald met Delcy

Mr Bukele needs another success story. He more than kept his promise to make the country safer—albeit at a cost to democracy. He suspended human rights and incarcerated almost 2% of the population, often on little more than a suspicion of gang involvement. Homicides were already falling when he took power in 2019, but the murder rate dropped from 38 per 100,000 that year to 1.3 in 2025.

That brought him an approval rate that hovers around 90%—and international acclaim. No one can deny it has changed lives. Our children are "privileged" not to know what it was like to have to think about where they get on or off the bus, says Johana Figueroa, a 38-year-old mother.

Others policies have fared worse. His last big technological wager—making El Salvador the first country to adopt bitcoin ▸▸

as legal tender, in 2021—fizzled. Ordinary people found no use for it. Mr Bukele treated it as a personal project, memorably saying he bought it from the bathroom. No one knows what becomes of the country's stash if and when he leaves power.

The economy, meanwhile, looks better on paper than it feels in the street. Most analysts predict GDP growth of around 5% this year, but the gains are uneven. It is good for those with government contracts, less so for the average Salvadoran. Foreign direct investment has not taken off. Salvadorans have noticed. In a poll in May by the University of Central America (UCA) in San Salvador, more than 70% pointed to economic troubles as their chief concern (just 2% cited crime). Mr Bukele has raised his own bar. "He has such credibility from the security issue that people think he can solve any other problem," says the analyst.

It is too early to judge the new schemes. The education experiment has won initial plaudits. In PISA, a global test of reading, maths and science skills among 15-year-olds, the volunteer students in pilot schools performed about as well as the average student in Germany and Sweden in 2022, according to the World Bank, one of the project's funders. But there is no evidence that this level of performance is attributable to the use of AI—volunteer students at selected schools are more likely to be high performers anyway. The World Bank called the results "surprising and very encouraging". Parents collecting their children from Mercedes Quintero school in San Salvador, the capital, are full of praise. Ms Figueroa says her nine-year-old daughter has shown "considerable" improvement. "Before it was books, books, books. Now she is more enthusiastic."

DoctorSV has not yet been independently evaluated, but it has the full-throated backing of the Development Bank of Latin America and the Caribbean, which is funding it. The bank claims that El Salvador has built "a universal, sustainable health system that is based on cutting-edge technology". Users, too, are impressed. "It is faster," says Andrea Vargas, 24. "I felt really bad one day and it sent me for tests and to get medicine—all for free."

Mr Bukele runs both projects from the presidential palace. An official at the education ministry describes bureaucrats being sidelined, with little access to the pilot schools. Many teachers have been sacked. The proven way to improve schools is to train teachers, not hand out gadgets, says Oscar Picardo, a Salvadoran education expert. He cites Sweden, which has begun pulling screens from the classroom in favour of books, as a cautionary tale.

Medical unions call the app a "plaster" that does not resolve shortages of medicines and specialists. Thousands of public health-care workers have been sacked, partly to shrink the state's payroll and meet the terms of an IMF loan. The costs are unclear too. xAI has disclosed no figures for its arrangement with the government. El Salvador's national assembly approved loans worth $576m for the education programme and a second phase of DoctorSV combined, with no real debate.

The biggest concern is that Mr Bukele has a track record of using policies to amass power. Some fear this experiment is really about handing personal data—from children and patients—to himself and tech firms. Plenty of people, at home and abroad, would like these policies to be genuine successes. But if Mr Bukele complains that he is denied the benefit of the doubt, it is for good reason. ■

Venezuela

The love-in

Donald Trump's rapport with Delcy Rodríguez bodes ill for her country

DONALD TRUMP grinned and gave a thumbs-up as he posed for a photograph beside Delcy Rodríguez, a leading member of the torturing, election-stealing regime which all but destroyed Venezuela. Mr Trump met Ms Rodríguez, who is Venezuela's unelected interim president, at the UN General Assembly on September 22nd. For Mr Trump the encounter in New York was a chance to highlight a foreign-policy success. For Ms Rodríguez it was a golden opportunity to charm Mr Trump in the hope that he ignores opposition demands for elections and continues to favour her biddable authoritarianism.

No one likes a groveller

Her strategy is evidently working. In January US special forces dragged Nicolás Maduro, the former dictator, out of his compound in Caracas and dumped him in a jail in New York. The next day Mr Trump threatened Ms Rodríguez, then Mr Maduro's vice-president, with a fate "worse than Maduro" unless she complied. That she is now chummily glad-handing Mr Trump seven miles from where Mr Maduro languishes behind bars underlines her survival instincts, her ideological flexibility and the fact that she has done almost everything Mr Trump wants. She is so pliant in part because the Trump administration controls all of Venezuela's oil revenues.

Above all, she has helped the United States grab that oil. Her government promptly overhauled Venezuela's hydrocarbons law to welcome more American investment. Then, last month, she made a big, dodgy deal to give the United States government, via a private company, rights to exploit 17 oilfields and cheaply get much of the oil they could produce. Given Mr Trump's fondness for both oil and obsequious obedience, this is bad news for those who favour elections.

The relationship between Mr Trump and Ms Rodríguez is the key factor influencing Venezuela's democratic future, but it is not the only thing that matters. A second round of negotiations in Caracas between part of the Venezuelan opposition and the regime is expected to wrap up this week. These talks are overseen by Marco Rubio, the US secretary of state, who seems keener on holding elections than does Mr Trump. The first round ended in a promise to replace the entire Supreme Court, crucial for overseeing a fair vote. The second began with the regime unblocking access to some independent media sites. More discussion is expected over steps towards repealing repressive laws used against opposition politicians.

There are ramifications in the United States, too. Senator Bernie Moreno, a Republican, has called for Venezuelan elections next July. In Florida, home to many Venezuelans, Mr Trump's embrace of a hated despot's deputy may hurt some Republican candidates in the midterms. Democrats are demanding elections and promising investigations into Venezuela policy if they win the House.

These politicians still have faith in María Corina Machado, the exiled opposition leader. She reportedly made three separate attempts to return to Venezuela just before the Trump-Delcy meeting, but failed. Her presence in the country would increase pressure for elections. The Trump administration has at least twice blocked her actual return and she remains in Panama. Until that changes, the Trump-charming Ms Rodríguez looks comfy in power. ■

India

Misery machine

DELHI

India's education system is failing in new ways

INDIA IS TALKING about education. After a hot summer dominated by youth protests that toppled the country's education minister, attention has stayed on the schools, colleges and universities in which almost 300m Indians are enrolled. The fatal collapse of a student hostel in Delhi on September 6th quickly became another symbol of neglect. Meanwhile the Cockroach Janta Party (CJP), which led the protests, has encouraged its supporters to report on schools across the country, turning the gaze of millions on social media onto the shoddy conditions in which Indian children are supposed to learn.

The spark of street action was an exam leak. But the fuel was rage at a system that has become what Yamini Aiyar of Brown University calls a "misery machine". In what are probably the world's most selective exams, tens of millions of poorly taught students compete for a tiny number of golden tickets into elite universities and government jobs. Their families fork out for private coaching, schools and colleges. But for most it ends in disappointment. Only 7% of graduates find a formal job within a year, according to Azim Premji University in Bangalore. Most are unemployed for years, thanks to a yawning gap between the numbers of graduates and jobs (see chart on next page).

Poor education is not the main reason that India is failing to create enough jobs—weak governance and bad rules that hamper the private sector are more obvious maladies. But it does not help. Even as the country churns out graduates, many firms struggle with hiring. India is "producing people with degrees, not skills," says Karthik Muralidharan of the University of California, San Diego. For three decades Indian education has expanded at breakneck speed. That has spawned new problems.

To see what is going wrong, follow the journey of a child. On her first day at school, she might feel thankful. In 1990 almost a quarter of Indian children did not attend primary school. Now just 2% miss out. But as enrolment rose, quality fell. By 2022 a survey of rural schools found three in five children in year five could not read a year-two text. There has since been a modest improvement, with some states pushing teachers to focus on basic literacy and numeracy. But most schools still fail to do this, meaning students lack the building blocks they need to learn. As a result, many sit quietly absorbing little or nothing.

That continues at secondary school. The CJP's focus on shabby classrooms makes sense as a campaign (who can defend ceilings with holes?). But India's real problem is its teachers. State governments are hopeless at holding them to account, ▸▸

partly because teacher unions act as large voting blocs. In 2024 rural secondary-school teachers were absent for one in every eight days. India has taken part in international PISA assessments only once, in 2009. Its schools did miserably, coming in the bottom three out of 74 countries and regions in reading, maths and science.

The rush to go private

No surprise then that parents are looking elsewhere. Almost 100m Indian children attend fee-paying schools. That is 39% of kids, up from 32% in 2015. A handful are excellent, but most are budget private schools for families who scrape by. It is good that parents are demanding better, and in theory a growing private sector leaves the state with more resources per child. But this mass exit means politicians feel even less pressure to raise standards. The private sector is also poorly regulated.

New problems are thus piled on top of old ones. The same dynamic is under way when a student reaches the booming tertiary sector. Around 30% of Indian children study past school, up from 20% a decade ago. Much of the rise is students from lower castes. It has been accommodated largely by the growth of "affiliated colleges"—small, privately run institutions that operate under the umbrella of a university.

At COMM-IT Career Academy, an affiliated college in south Delhi, a clutch of youthful students say they are paying 40,000 rupees ($420) a year. Most come from poor families, for whom this is a big and risky investment. They lacked the grades for public universities, where fees are much lower. "There is a lot of pressure," says one. "Too much!" another exclaims. The teachers are nice, they say, though the facilities are basic. The college advertises itself as one of the "Best collages [sic] in Delhi"; its website features a carousel of "distinguished alumni" in corporate jobs.

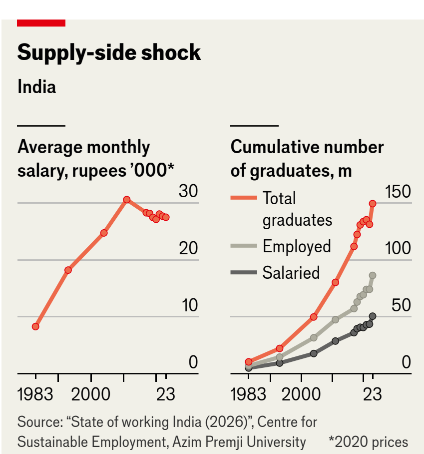
More than 10,000 such colleges have sprouted in the past decade. Experts have concerns. One problem is that cash-strapped universities now depend on the affiliates for revenue, and so have little incentive to insist on high standards. And poor schooling means many students are already years behind when they start college. No wonder some businesses believe that degrees are worthless.

Survey the whole system, and three things stand out. The first is that India has only partially escaped its history. The country's early leaders neglected mass education, believing industrial modernisation could be achieved with a small number of elite schools and universities. Today India has a mass education system, but it remains highly elitist: a small number of high-quality institutions—largely occupied by the privileged—followed by a long tail of poor ones. "We never designed a system focused on the median child," says Amit Basole of Azim Premji University.

The second is that education has too often become a racket. Private schools take in perhaps $30bn a year, and coaches more than $8bn. Both prey on aspiration. Poor families invest in low-grade degrees that offer little prospect of a good job. In a country like India, a growing private market needs strong regulation. Instead, many politicians see it as a way to make money, says Santosh Mehrotra of Jawaharlal Nehru University. "Who has set up these affiliated colleges? It's the politicians."

Third is misallocation. India's education system provides a poor return on investment. It keeps growing partly because it has more than one function. For families a degree is a social-status signal. For women it is a way of improving marriage prospects. Even manual jobs often now, needlessly, demand degrees.

The CJP's success has been to raise education's salience. Politicians are frightened because the group's message has wide appeal—both to the students caught up in the misery machine, and to the parents greasing its wheels. Yet the failures of Indian education are systemic. They will not be fixed as easily as a leaky classroom roof. ■



Australia

G'dAI mate

Australia's giant data-centre boom

AUSTRALIA GETS by with a fair dose of luck. Now it wants intelligence, too. It has set about building data centres, the engine rooms of the global drive for artificial intelligence. Investors have plans to pour some $156bn into computing clusters there—eclipsed only by the United States at $1.8trn and China at $295bn. The reasons for this are, as with Australia's mineral riches, mostly the result of good fortune. But its government wants to make sure that it lasts.

This month senior Australian officials travelled to San Francisco to woo American AI labs. Chastened by a growing public backlash over data-centre investment in America and feeling competitive pressure to expand their computing power, AI bosses are looking elsewhere. On September 16th it was reported that Anthropic had signed a deal to lease a 2.16 gigawatt facility in Australia's north-east, on par with the largest in the world.

Some of the reasons for the boom down under are obvious. Australia is sunny and has lots of space. It is among the lowest-cost producers of renewable energy anywhere, according to the country's science agency. The huge amounts of electricity sucked up by chips training and serving AI models is less of a concern if facilities can generate their own solar and wind power. And big sheds emitting strange noises can be kept far away from the population.

Other motives are less intuitive. India is Anthropic's second-largest market by usage, and Singapore and South Korea (alongside Australia) have high AI adoption rates. But American companies prefer to avoid running expensive subsea internet cables through the South China Sea, where they could be vulnerable to sabotage in a potential conflict involving China. So most new cables running from America to Asia first stop off in Australia, making it a natural home for compute serving Asia.

It helps considerably that the "lucky country" is friends with America and enjoys the rule of law. AI labs worry about their model weights being nicked by adversaries. Australia is a member of the Five Eyes alliance of Anglophone spooks (see International section). Its cyber agencies are used to protecting sensitive American data. And Australia enforces American export controls, limiting the risk of sought-after Nvidia chips being siphoned off to competitor countries, namely China.

Australia's pitch comes with some "ground rules", says Andrew Charlton, the minister responsible for AI. Its government is eager to head off any possible populist backlash, so it plans to introduce a set of basic standards for new data centres: they ▸▸

must generate more electricity than they take from the grid, pay for the costs of grid connection, be kept away from homes and schools, and minimise water use. Such standards are "tough but in the long-term interest of the companies themselves," says Mr Charlton.

The government is also keen to ensure that the income from operating data centres does not only flow to Silicon Valley. Unlike iron-ore mines, data centres sustain few jobs once construction is complete and are therefore unlikely to be a big source of tax revenue. Mr Charlton wants AI labs to set aside some compute resources for Australian firms and researchers, but this attempt at industrial ladder-climbing is currently framed as an "expectation" rather than a requirement.

To ensure that the planned investment does indeed arrive, Australia will need to move quickly to clarify how its copyright laws may limit AI training on proprietary information. Officials in Canberra want Australian businesses and creatives to be paid for their data. If AI labs agree to fork out, it may create legal headaches for them in America, where they have been freely scraping books and vast swathes of the internet. Other attractive destinations are also vying for American compute, including Canada and the United Arab Emirates. If it gets too prescriptive, Australia risks pushing its luck. ■

Sri Lanka

Sentences without answers

COLOMBO

Guilty verdicts over the Easter bombings have failed to satisfy

THE WHEELS of justice turn slowly. But on September 22nd, more than seven years after suicide-bombings in churches and luxury hotels killed 269 people on Easter Sunday, 2019, a Sri Lankan court convicted and sentenced 15 people to between 200 and 260 years in prison. Nine others were acquitted. The three judges summarised their 2,000-page judgment to a packed courtroom, as paramilitary police patrolled outside.

Yet the rulings have not satisfied the Catholic church, victims' families or survivors, who say their fight is not over until the *maha molakaru* ("great brain" in Sinhala) is brought to justice. Among the dead were 171 Catholics. And the church will "surely, surely" keep up the pressure, insists Jude Krishantha Fernando, a Catholic priest and spokesman.

The Islamic State-inspired attacks on three churches and three hotels were carried out by members of a home-grown group, National Thowheed Jamath. The suicide-bombers were led by Zahran Hashim, a preacher from Sri Lanka's east, who detonated his explosives at the Shangri-La Hotel in Colombo. In one of the country's biggest-ever criminal prosecutions, the attorney-general in October 2021 indicted the accused, the bombers' alleged accomplices, on 23,270 charges.

Malcolm Ranjith, Colombo's cardinal, repeatedly called for faster action. In April 2025, the sixth anniversary of the bombings, he said that "political obstruction" and "systemic sabotage" were not allowing investigations to "reach their logical conclusion"—especially, he said, after the presidential election in November 2019.

That vote catapulted a Sinhalese nationalist, Gotabaya Rajapaksa, to power in a landslide victory. In 2009, as defence secretary, he had led the military defeat of Sri Lanka's Tamil Tiger rebels. Mr Rajapaksa announced his candidacy just weeks after the bombings. He promised to deliver "security" and "eradicate terrorism". He also tapped into anger over the administration's failures to act on intelligence warnings from India.

Those failures by a dysfunctional coalition government, led by Maithripala Sirisena, have been separately adjudicated. In 2023 the Supreme Court ruled that senior officials had indeed failed to act on warnings and ordered five of them to pay a combined 310m Sri Lankan rupees ($943,000) to a fund for victims. Mr Sirisena alone was set back 100m rupees. Then, in July 2026, a Colombo court sentenced Hemasiri Fernando, the defence secretary at the time of the bombings, and Pujith Jayasundara, the then police chief, to death on 854 counts of murder and attempted murder arising from their failure to act on warnings.

The verdicts are "OK", but "not enough", says Mr Fernando, the priest. The church wants action on claims by Hanzeer Azad Maulana, a Sri Lankan whistleblower, to Britain's Channel 4, that he set up a meeting in 2018 between Hashim and Suresh Sallay, a former director of military intelligence, at which Mr Sallay allegedly said that creating insecurity would help Mr Rajapaksa clinch the presidency. Mr Sallay denies the meeting or any involvement in the attacks.

Mr Rajapaksa quit in 2022 amid an economic crisis. In June a magistrate imposed a travel ban on him after investigators said they had "reasonable suspicion" of his direct or indirect involvement in, or prior knowledge of, the attacks. He denies wrongdoing, and no charges have been filed. Only when the "big people who have the power, the real culprits, the masterminds" are produced in court and punished will the church be satisfied, says Mr Fernando—without naming names. ■

Malaysia

Royal treatment

Najib Razak will soon get out of jail

WHEN NAJIB RAZAK was going through a tough time as Malaysia's prime minister back in 2015, he knew he could count on a few mates. "If he needs advice, I am here as a friend," Sultan Ibrahim, the ruler of the southern state of Johor, told reporters. The sultan and the prime minister remained close, even as the scale of Mr Najib's theft from the 1MDB sovereign-wealth fund became clear.

On September 18th Sultan Ibrahim once again came through for Mr Najib, and in a big way. The sultan acceded to Mr Najib's request to serve out the remaining two years of his six-year sentence for corruption at home. This has caused grief for the government of Anwar Ibrahim, the current prime minister. Mr Anwar has said he did not advise Sultan Ibrahim, now serving as Malaysia's king as part of the country's unusual rotating monarchy, to grant clemency to Mr Najib. But nor has he said that he advised against it.

Mr Anwar's woolly answers are probably carefully phrased in order to keep his unwieldy coalition together. Among its members, Barisan Nasional, which Mr Najib used to run in his heyday, has made getting him a pardon a priority: its bigwigs have repeatedly and openly pushed for it, and brought it up privately with the king. On the other hand, the Democratic Action Party (DAP) has loudly demanded that Mr Najib pay a price for his corruption. Its

Friends in high places

head resigned from cabinet in protest at the decision. But the DAP has not yet withdrawn its support from the government, which would leave it with only the barest of majorities in parliament.

Both the DAP and Mr Anwar's own People's Justice Party are desperate to avoid a general election before one is due, which is not until February 2028—though few observers expect the coalition to survive until then. Their parties were walloped by voters at state elections this year, as Barisan (in partnership with the PAS, an Islamist party) surged to victory. Analysts expect that Barisan and PAS would probably win the next general election if it were held today. That has had prominent members of Barisan calling for early polls.

Mr Anwar appears to be left with few good options. If he does not placate Barisan through lenient treatment of Mr Najib, an early election could lead to a Barisan victory. It, in turn, would probably push for a broader amnesty for Mr Najib, who is appealing against a 15-year sentence in another case. But being seen to have concluded a sweetheart deal for the former prime minister is unlikely to improve the prospects of parties that promised to crack down on corruption.

Bridget Welsh, an expert on Malaysian politics, sees the glass as half full. Few expected when Mr Najib was unseated that he would ever see the inside of a prison cell, she says. That he has served four years behind bars shows that Malaysia has changed. But others fear Barisan's pact with the PAS means that plunder will soon be accompanied by sectarianism.

Mr Najib is not out of jail yet; the pardons board that the king chairs insisted that he return $12m, a fraction of the nearly $540m that he stole, before he can be released. Mr Najib says that he cannot pay because his bank accounts are frozen. Shamelessly, Barisan has appealed to his long-suffering victims, the Malaysian people, to chip in. ■

Japan

Invisible children

MIYOSHI

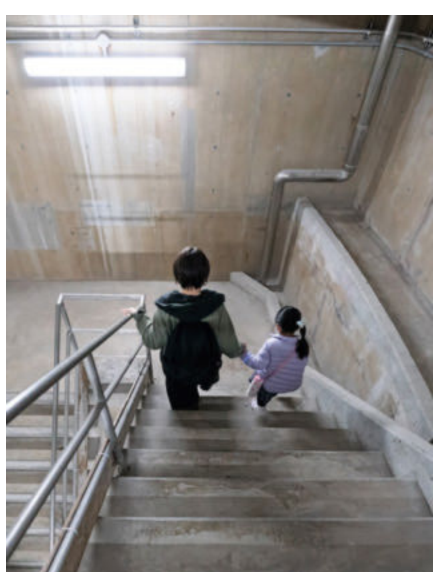
Why relative poverty is stubbornly high for Japanese children

JUST BEFORE noon, in the sticky summer heat, the children drifted into a library in Miyoshi, a city in central Japan. They handed over vouchers and collected their bento boxes. Some settled down to eat with friends in the cool; others took their boxes home.

With Japanese schools closed for the summer holiday, the city served hundreds of meals a day at 11 of its public facilities. But the tranquil scene masked a grimmer reality. Without school lunches or air-conditioned classrooms during the long summer break, many of the children would struggle to eat properly or escape the heat.

Japan is often thought of as an affluent society. Yet it is surprisingly unequal in places. Government figures show that in 2024 11% of children lived in relative poverty, meaning their household's disposable income, adjusted for family size, is less than half the national median of ¥2.77m ($17,500). This "relative poverty" rate has fallen from a peak of 16% in 2012, but as Japan emerges from decades of deflation higher prices are hitting poor households especially hard. Food prices have risen by around 30% since 2020. The problem "has never felt as dire as it does now", says Ogawa Koji of Usnova, a non-profit that helped Miyoshi's programme.

Much of the problem stems from the particular troubles of single mothers. Japan's relative-poverty rate for single-parent families is among the highest in the OECD group of mostly rich countries, at 44.7%. That is despite nearly 90% of single mothers working. Japan also has one of the widest gender pay gaps in the rich world. Women are concentrated in the lower track of its two-track labour market, in "irregular" jobs that offer low pay and little security.



Some are less equal than others

Compounding the problem is how little ex-husbands provide. Mothers get custody in around nine in ten divorces, yet roughly 70% receive no child support, according to an official survey. In April the government revised family law to introduce joint custody, making Japan the last country in the G7 to do so. Officials hope that fathers who remain involved in their children's lives will be more inclined to pay child support.

Rumbling tummies

Recent economic trends are worsening matters. According to a survey by Save the Children Japan, an NGO, nearly 90% of respondents who applied for its food handouts blamed recent inflation. Meanwhile, their average daily spending on food per person dipped below ¥500—akin to the levels seen among those in absolute poverty, observes Gan Sakiko of Atomi University in Tokyo.

Poverty in Japan is rarely in your face. The country has the world's lowest rate of homelessness, according to Greater Change, a British charity. Yet concern about inequality is growing. The term *oyagacha* has entered common use. It combines the Japanese word for parent with that for a type of capsule-toy machine, capturing the idea that children cannot choose their parents and that their prospects depend heavily on luck.

Support for hard-up families does exist but is woefully inadequate, says Honma Kanazu, the director of Florence, a non-profit organisation. Single parents cannot receive handouts if their earnings exceed thresholds that are set at unreasonably low levels. That can discourage them from working longer hours.

Targeting more help at poor households would be a better use of public money, but it is politically tricky. Although the cost of living has become a prominent political issue, debate tends to focus on the squeezed middle class. According to one estimate, only around 20% of households eligible for welfare actually use it; stigma prevents many from applying in the first place, and when they do, they are often batted away by unsympathetic officials.

Back in Miyoshi, the food handouts take such sensitivities into account. The bentos are available to all children; most of them pay, but children from low-income households get them free. Payment is settled online in advance so you cannot tell who comes from a low-income household, explains Oyama Tasuku, the mayor. Such discretion helps families accept support without stigma. Yet it also points to a broader characteristic of deprivation in Japan: much of it persists quietly beyond public view. ■

China

The Chinese Communist Party

Red stars rising

BEIJING

Teenagers of the heady 1980s are climbing the Communist Party's ranks

NEXT YEAR, at the biggest recurring event on China's political calendar, a five-yearly Communist Party congress will confirm who will run the country until 2032. The supreme position of Xi Jinping is in little doubt. But hundreds of senior roles below him are up for grabs. A series of secretive meetings over the coming months will decide who gets them. The dates of one such event have just been announced: a gathering from October 26th to 29th of the 370 or so leaders who form the party's Central Committee. Officially they will discuss "full and rigorous party self-governance", meaning, in essence, obedience to Mr Xi. Privately they will ponder a generational shift in Chinese politics.

Rising stars are champing at the bit in China's provinces. Some are moving to senior roles in Beijing. Known as the seventh generation of party leaders, they are a very different breed to Mr Xi. Born in the late 1960s and the 1970s, they are the first generation with few if any memories of the Mao era. Their formative years were in the 1980s, when the country was opening up to the world, exploring liberal ideas and experimenting with capitalism. Mr Xi shows no nostalgia for those heady times. But he is 73 and his lieutenants not much younger. They may have to turn more to the seventh generation to fill important jobs. One of them may end up being Mr Xi's successor.

In Chinese politics, the generation-numbering system is complicated. As the founder of Communist China, Mao Zedong led the first generation. The pragmatic reformer, Deng Xiaoping, is described as the leader of the second generation, even though he did not immediately succeed Mao and belonged to the same cohort of veteran revolutionaries. By the time Mr Xi took power in 2012, generations had begun to refer more to the age group from which senior officials are drawn. Mr Xi belongs to the so-called fifth generation, mainly born in the 1950s. By post-Deng norms, he should have stepped down ten years later in favour of a politician from the sixth generation, born in the 1960s.

Instead he stayed on, having abolished term limits for the presidency (Mr Xi also holds the more important posts of party general secretary and leader of the armed forces, which are not term-limited, but since he wanted all three jobs at once, changing the rules for the presidency was essential). Meanwhile his anti-corruption campaign has cut swathes through the sixth generation and dismantled its patronage networks. Those once tipped for leadership have been arrested or sidelined. Perhaps a fifth of the Central Committee's voting members have been purged in the past five years.

Amid the wreckage of the sixth generation, the seventh is rising. Even if Mr Xi remains at the helm at the party's 22nd congress in 2032, surrounded by an inner circle of gerontocrats, notably younger politicians will play big roles. In August atten-

→ ALSO IN THIS SECTION

tion turned to one possible seventh-generation star, 54-year-old Zhu Zhongming, when he was appointed as Shanghai's acting mayor. Should he become the city's party chief, he would be a shoo-in for a seat in the ruling Politburo. Others worth keeping an eye on are Liu Jie, 56, who is the governor of Zhejiang, a wealthy eastern province (Mr Xi once had that job) and A Dong, 55, the first secretary of the Communist Youth League, the party's youth wing (two predecessors in that post later became the party's general secretary).

Typically, senior party officials retire if they have reached 65 by the time of a congress, while Politburo members retire at 68 (in 2022 Mr Xi became a rare exception, as did China's highest-ranking uniformed military official, Zhang Youxia, 76, who was expelled from the party and the armed forces on September 21st for "severe violation of political discipline"). That would suggest two-thirds of the current Central Committee will step down next year and the proportion of seventh-generation officials will rise from 8% to over 40%.

Blank faces

There is scant public information on senior party members. Still, members of the seventh generation stand out in several ways. Unlike those of the fifth and sixth generations, they did not suffer massive disruption to their education during the Cultural Revolution of 1966-76. Many of them are graduates from elite institutions. A study by Li Cheng, now of the University of Hong Kong, found that over half of the most senior hundred or so seventh-generation officials had PhDs. A third had studied engineering; finance and economics were also favourite subjects.

Some of the seventh generation have spent long periods outside mainland China. Yin Yong, the 57-year-old mayor of Beijing, has a master's from Harvard University; Guo Ningning, 56, is a rising star (and, very unusually for a senior politician, a woman) in the eastern province of Fujian who spent several years working for a state-owned bank in Hong Kong and Singapore. (Mr Xi's first and longest recorded trip outside China was two weeks he spent in America as part of an agricultural delegation to Iowa in 1985.) Unlike their elders, who typically have spent most of their careers in party, government and military jobs, these cadres are more likely to have served as business leaders, albeit in state-owned enterprises.

Up-and-coming officials have much weaker connections with China's revolutionary past. Mr Xi has a deep relationship with Mao's era: his father fought alongside Mao as a guerrilla leader and was later purged. He himself, under Mao, was "sent down" to a poor village for seven years as a youth. But he has cited the experience approvingly for nurturing ties with ordinary folk; his centralisation of power and stress on ideology has Maoist overtones.

In the 1980s, when the seventh generation was coming of age, China was filled with relief that the Mao years were over. Thanks to easing censorship, the decade became the most intellectually liberal since the 1950s, with even state-run television airing subtly subversive programmes. This window of openness came to a bloody end with the army's crushing of the Tiananmen Square protests of 1989. Many of the seventh generation would have been roughly the same age as the pro-democracy demonstrators who had filled the square and streets across China.

Might that suggest that closet liberals are climbing the party's ranks? Party members who were directly involved in the unrest were purged soon after (though some lied and kept their membership). Ideological vetting under Mr Xi would have rooted out others. Cadres are "deeply socialised and trained" by the time they wield much power, notes Wu Guoguang of Stanford University. Still, the seventh generation's early exposure to open-minded thinking should not be dismissed—after all, subsequent generations have had even less. A survey last year by researchers in China and Britain suggested Chinese people born in the 1990s (one day to join the ninth generation, perhaps) are less likely to support democratic values than their elders.

A seventh-generation official has a decent chance of eventually ruling China. At the apex of power in Beijing is the Politburo Standing Committee, which has six members in addition to Mr Xi. All but one are old enough to retire at the 21st party congress, which is likely to be held late next year. A seventh-generation official could then in theory skip some ranks and join it. But Mr Xi is unlikely to empower such a young official just yet: that man would be seen as an heir-apparent, and Mr Xi appears in no hurry to choose one (much less a woman: none has ever served in the Standing Committee).

But that might change by the 22nd congress, when Mr Xi will be 79. A member of the seventh generation, who by then would be in their 50s and 60s, would still be young enough to be a credible successor, says Jonathan Czin, a former CIA analyst. "If Xi is going to be in his 80s, does it make sense to pass the baton on to somebody who's 70?" But Mr Xi would have a problem: he may have to pick someone with whom he has had relatively little chance to build up trust. This could cause turbulence. "Whoever is the first person that Xi picks is not going to be the last," reckons Mr Czin (Mao and Deng both cycled through several heirs-apparent). "I'm buckling up for a pretty tumultuous period in Chinese politics." ■

Education

PISA slices

What if all of China's provinces took part in international school tests?

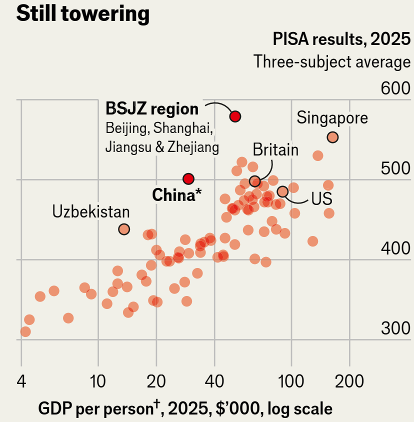
MANY PARENTS have heard of PISA, the Programme for International Student Assessment, which tests 15-year-olds worldwide on maths, reading and science. The 2025 results, released this month, were a disappointment for many countries. But the 12,385 mainland Chinese who sat the tests made their parents proud. They scored better than any other contingent in maths and science and came second only to Singaporeans in reading.

Real devotees of the programme have also become familiar with another four-letter abbreviation: BSJZ. These unpronounceable initials stand for Beijing, Shanghai, Jiangsu and Zhejiang, the only parts of the mainland that took part. The four locations (two mega-cities and two eastern provinces) have a combined population of almost 200m. But they are sadly not representative of China as a whole. Enrolment in academic high schools and universities exceeds national rates. And disposable income per person averages almost 70,000 yuan a year ($9,700), about 60% higher than the mainland average.

In 2018 researchers at the World Bank tried to get a sense of the bigger picture. Various bits of China have taken part in PISA at different times and thus at different levels of development. That allowed the experts to calculate a link between disposable income and test scores. Since China's nationwide income is known, the researchers could use this relationship to infer PISA scores for the whole country.

The Economist has updated this approach, adding data from later assess-

Still towering



*Extrapolated nationwide score †At purchasing-power parity
Sources: OECD; World Bank; *The Economist*

ments. The raw trendline between income and results suggests China would have scored highly even if every province had taken part. Its extrapolated maths score of 579 would still have been world-beating.

But caution is required. Most countries performed worse than hoped in 2025, perhaps because of the lingering effects of the covid-19 pandemic or technological disruption to learning habits. Even the students from Beijing, Shanghai, Jiangsu and Zhejiang did worse on reading than in 2018. And their scores on other subjects did not improve as much as you would expect given income gains. That suggests some kind of break in the trend.

The simplest way to adjust for this break is to drag the pre-2025 trendline down so that it aligns with the actual 2025 results for the four rich places that took part. By that yardstick China as a whole would have scored 536 on maths. Although lower than BSJZ's actual result of 612, the country would still have ranked fourth worldwide. China's average score across all three subjects (501) would have placed it seventh, much higher than you would expect given its economic level (see chart, previous page).

China is not the only country that enrolls only some of its kids in PISA. Iraq is represented only by its Kurdish region; Tajikistan by its capital city, Dushanbe. But if our calculations are roughly right, China should welcome countrywide participation. Let China be represented by China. And let BSJZ pass into PISA history, as hard to remember as it is to say. ■

Media controls

How tight is right?

The party wants to tweak online censorship

"TREATING DIFFERING voices as floods and terrifying beasts is a fundamental misunderstanding of the nature of governance," would be an unsurprising homily from a liberal newspaper in a democracy. From the actual source, *Qiushi*, the Chinese Communist Party's main theoretical journal, in September, it is positively startling. Other party outlets have been sounding similarly enlightened. "Wherever energy is spent on targeting the commenter and blocking channels of speech, almost without exception the result is an even greater crisis of trust," said *China Youth Daily*, run by the Communist Youth League, in July. Some officials "seek only silence in public discourse, not the resolution of problems, and habitually block and delete posts instead of solving issues", *China Comment*, a magazine run by the country's official news agency, Xinhua, also weighed in that month.

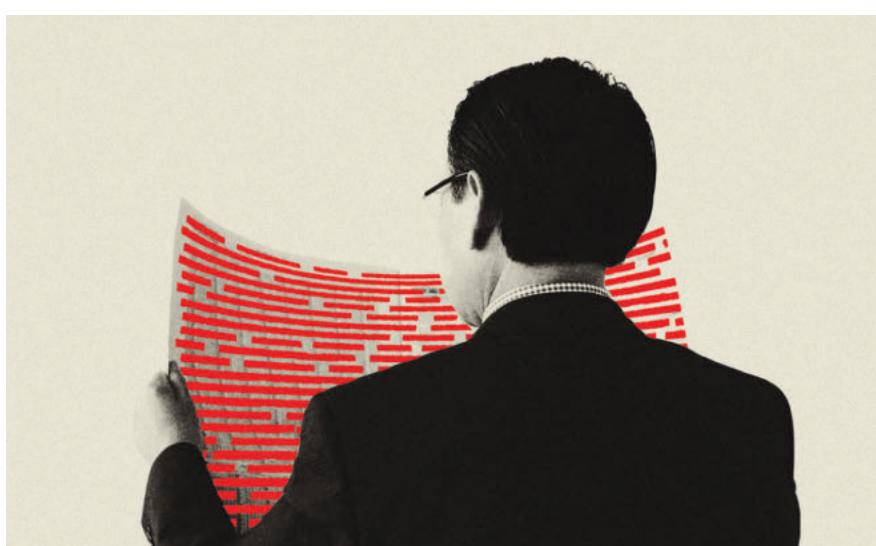
Is China going through one of the post-Mao era's occasional phases when liberals in the establishment push back against conservatives through articles like these? Far from it. Since Xi Jinping took power in 2012, liberals have been all but silenced. And censors have been as frantic as ever of late in their efforts to scrub the internet clean of grumbling about officialdom. In July news turned viral online of a parking-space dispute between an ordinary citizen and a cadre. The censors deleted suggestions that an inquiry may have been rigged in the official's favour. The police are ever vigilant, too. Dare to post a message online that the death toll in last month's flash flood on the Nepal-China border was higher in China than reported? Seven days in jail for that. A system that brooks no dissent is behaving true to form.

But China's leaders do sometimes worry that censorship can go too far. Overly tight restrictions on everyday moaning, they suggest, can make it harder to get the feedback they need to improve government behaviour and thereby defuse public grievances before they explode on the streets. In China, calibrating how much censorship to apply is an art that officials often struggle to master in a way that pleases their bosses. In recent months several articles in state media have implied that many are not doing it right.

Officials would be correct to think that Mr Xi prefers them to err on the side of caution when deciding whether to censor. "Unhealthy discourse can become a narcotic for the public, a social divider, a soft knife that kills and a catalyst for unrest," he told media bosses a decade ago.

But Mr Xi may now want some fine-tuning. Examples of over-censorship given by the media imply that his concerns relate to the deletion of comments that reflect badly on local officials. There is no hint that he wants to encourage criticism of the party, let alone of himself. *China Comment* cited several examples of excessive twitchiness by officials, such as their blocking in May of a person's social-media account for posting a complaint on a local tourism department's account about the cleanliness of seating at a concert. Another involved someone who last year posted a video online of a woman trying to assert her right of way on a narrow road by flashing her husband's law-enforcement credentials. Police put pressure on the citizen to delete the footage. He did so, but later reposted an edited version that drew 10m views.

Mr Xi will hardly be surprised by such stories. Local governments often go to great lengths to prevent higher levels from learning about their mistakes. During Mr Xi's rule, many authorities have used the achievement of "zero public-opinion [incidents]" to assess whether officials are fit for promotion. "The obsession with zero public opinion has given rise to a bizarre and inverted approach to handling public complaints, resulting in multiple deep-seated governance problems with significant harm," thundered an article on the website of the party's main mouthpiece, the *People's Daily*, in July. Local officials, however, will remain cautious. ■



CHAGUAN
From the barrel of economic guns

Applying Mao's thought to China's protracted struggle with America

TRADE WAR. Tech war. New cold war. All of these shorthand descriptions for frayed Sino-American ties have an air of foreboding. Not so the label that the two countries agreed on earlier this year, at China's urging. They are now officially in a "constructive relationship of strategic stability". If that fails to set your pulse racing, the cumbersome phrase has succeeded: it is meant to signify a calm approach for managing the superpowers' tensions.

More candid, and more alarming, is how many thinkers in China now describe its relationship with America. Instead of strategic stability, they call it a "strategic stalemate"—a loaded term in China, evoking not diplomacy but a struggle for the upper hand. Among those to do so recently: advisers to the Chinese cabinet, researchers under the Ministry of State Security, and scholars at leading universities. Familiar to many in China, the words are drawn from Mao Zedong's "On Protracted War" speeches, delivered in the remote Communist base of Yan'an in 1938.

Mao's musings nine decades ago should not be given undue weight. But the protracted-war framework yields valuable insights about how China views its contest with America and offers clues to how things might develop. With Xi Jinping about to hold talks with Donald Trump in Washington as *The Economist* went to press, the old dictator's words in his guerrilla days are of interest.

Mao argued that in the first phase of a long war against a technologically superior adversary, scrappy revolutionaries must hunker down in defence. The next phase is strategic stalemate: the overstretched adversary can no longer advance and the revolutionary forces get better organised. Then comes the final phase, the counter-offensive, when the once-weaker revolutionaries rout the once-stronger enemy.

So declaring that China and America have reached strategic stalemate is freighted with significance. No one doubts which of the two powers is to be seen as the weary incumbent and which the energetic revolutionary. The trade war started in 2018, when Mr Trump slapped an initial batch of tariffs on China. For the rest of his first term, China was on the back foot. It was not entirely quiet, hitting back at America with its own tariffs. But it settled for a lopsided deal that if implemented in full would have led to China buying far more American goods and opening more widely to American investors. In Maoist terms, the deal showed "the courage to retreat", often necessary in the first phase of protracted war.

The point of retreat is not to give up but to conserve resources for a fightback. This is precisely what China did throughout Joe Biden's presidency. Keenly aware of where America had immense leverage—notably, in advanced semiconductors—Chinese officials redoubled efforts to cultivate domestic alternatives, no matter how expensive. They also honed their counter-attack, creating a stronger system of export controls and tightening their grip on the Chinese companies that mine and process critical minerals. When Mr Trump returned to office and cranked up tariffs, his officials were astonished by the ferocity of China's pushback. In blocking the exports of minerals, especially rare earths, China threatened to bring swathes of American industry to a halt.

It has become commonplace to say that the superpowers have achieved rough parity in their ability to harm each other. America has computer chips; China has rare earths. Analysts call it "mutually assured disruption" or a "balance of vulnerability", as if the two countries are, in economic terms, basically equal. The "strategic stalemate" framing gets at something more profound about this parity: to have come this far is already progress for China.

One obvious question is whether Mr Xi has designs on the third stage of the "protracted war"—a full-blown counter-offensive. Last year when trade hostilities with America were at their most intense, state media urged the public to revisit Mao's speeches, to boost confidence in China's resilience. Yet the parallels with the great helmsman's analysis go only so far. Most Chinese thinkers believe it is impossible to score a decisive, enduring economic victory over America. Maintaining a strategic stalemate looks like a more realistic objective. Huang Renwei of Shanghai's Fudan University has said, hopefully, that it can last for 30 years.

Not as good as checkmate

The trouble with a stalemate is that it may prove short-lived. Both countries want to break out of it and are seeking new ways to gain an advantage—and are alert to risks that might pin them down. Fear of being permanently reduced to an inferior position in artificial intelligence is one reason why China is reluctant to embrace AI safety regimes proposed by America. Until Chinese AI models are as powerful as America's—ie, until they have reached a stalemate in AI—China appears unwilling to slow its AI labs down.

The fragility of the stalemate also explains why China has continued to restrain rare-earth exports to America and its allies, especially Japan. If the two superpowers truly enjoyed a constructive relationship, as they claim, China could have created a transparent, efficient licensing system for global companies seeking rare earths. Instead their relationship is marred by mistrust, and China knows that throttling the supply of rare earths is the swiftest way it can discipline Mr Trump if he turns more aggressive again.

More dismally for China, another aspect of Mao's stalemate phase also applies today. He warned it would be "a very painful period for China", during which "pessimism will grow". The echoes with the economic situation today are clear. A relentless focus on technological self-reliance has helped insulate China from American pressure. But Chinese people have paid the price, their income growth slowing as the state channels money into industrial capacity rather than social welfare. It resembles the economy of a country at war—and a protracted war at that. ■

Middle East & Africa

America's thirty-five years' war

Hegemon no more

DUBAI

America is stepping back from a region it never managed to remake

WHEN WORLD leaders met for the UN General Assembly in September 1991, a period of unchallenged American hegemony in the Middle East seemed at hand. The Pentagon had just waged a swift war, with many allies, to expel occupying Iraqi forces from Kuwait. American diplomats were preparing to host the Madrid conference, the first direct talks between Israel and a group of its Arab neighbours. With the Soviet Union on its last legs, America looked ready to shape a new order in a turbulent region.

What followed instead was 35 years of disorder, as America lurched from one martial folly to the next. The latest, Donald Trump's conflict with Iran, was meant to be over within days but is now entering its eighth month. It has imposed enormous costs on his closest Arab allies, and on the rest of the world. To the grandees gathered at the UN in New York this week, America does not look much like a solution to the Middle East's woes: it is a source of them.

This will be one of the war's lasting consequences, no matter when or how it ends. Though America will not leave the Middle East, it will have to step back from its role as the pre-eminent power. Its allies have lost faith, its voters are exhausted and its strategists will need to confront growing crises elsewhere. No one is poised to fill its role, least of all the Arab states. That will make for messy times ahead—yet in the long run, the end of the American era may not be a bad thing.

For now, though, the goal is simply to reach the end of the war. America and Iran held three hours of indirect talks at the UN on September 22nd, with Qatari envoys passing messages between the two. It was their first such parley since June. Mr Trump called it "very productive". Then again, he also reiterated his threat to "annihilate" Iran in his address to the assembly.

In private, diplomats were less effusive about the talks. They offered a chance for both sides to reiterate their positions, but the format was hardly conducive to a breakthrough—and the positions remain far apart. Iran wants America to return to the "memorandum of understanding" (MOU), the short-lived deal signed in June. Mr Trump would prefer to scrap the MOU, which was only meant to be a 60-day interim accord, and negotiate something new.

The American president also met officials from Gulf states, along with Turkey and four other Arab countries. Again, messages were mixed: he cited "a lot of momentum" towards a deal, and also warned that he might bomb a nuclear site in Iran. Meanwhile, both sides continue their economic war. Iran has attacked at least five tankers in the Strait of Hormuz over the past week. On September 23rd America imposed sanctions aimed at foreign firms that refuel or service Iranian planes, which will, in effect, bar Iran's airlines from flying to most destinations abroad.

→ ALSO IN THIS SECTION

While the war in Iran drags on, the one in Yemen has escalated. This month the Houthis, an Iran-backed rebel group, abandoned a 2022 ceasefire with their Saudi-supported foes. They seized a chunk of Yemen's south-western coast. That gave them a firmer grip over Bab al-Mandab, the waterway linking the Red Sea to the Gulf of Aden, where they were already striving to impose a blockade on Saudi vessels.

The Houthis also resumed attacks on Saudi Arabia itself. On September 15th the kingdom said it intercepted a drone near Mecca, Islam's holiest city. Four days later a Houthi missile hit a fuel tank at Riyadh's airport, their first attack on the Saudi capital in years. Separately, Iraqi militias struck the kingdom's most important oil pipeline, knocking it out of service for more than a week (it resumed operations on September 22nd).

Yet none of this sent oil prices to catastrophic levels—the main lever by which Iran hopes to pressure Mr Trump into a deal. The price of Brent crude climbed to $109 a barrel after the Houthi offensive and the pipeline attack, only to fall back. It was about $102 as *The Economist* was published. That figure does not tell the whole story, of course: wider energy markets are in rough shape. The price of "dated" Brent, for delivery in a few weeks, broke $130 a barrel this month. Refined products are scarce, with diesel now averaging $6.52 a gallon in America, a record high. But Mr Trump is holding firm, even as fuel prices threaten his Republican Party with a drubbing in November's midterm elections.

Trump's hope over experience

America, for its part, still hopes economic pressure will compel Iran to yield. Its two-month blockade of Iranian shipping is causing chaos. With its ports idled, Iran is struggling to redirect trade via overland routes: hundreds of lorries are stuck in days-long queues at the borders. The rial has hit one record low after another. Inflation is near triple digits. Grounding Iranian airlines will disrupt the country's pharmaceutical supply chains.

Masoud Pezeshkian, the Iranian president, has acknowledged the depths of the crisis. Muhammad Bagher Ghalibaf, the speaker of parliament, grumbles about hardliners who reject diplomacy. Yet like Mr Trump, the regime is willing to endure more pain. Neither side can swing the war decisively in its favour.

The view in Washington, Tehran and the Gulf is that it will drag on until the end of the year. Muhammad bin Salman, the Saudi crown prince, has told the Americans not to rush back into the MOU. He would prefer that they maintain their blockade and seek a new deal. Most Gulf states share that view (Qatar and Oman are outliers). Iran is in no hurry to make a deal that might lower oil prices and give Mr Trump a pre-midterm boost. Analysts at JPMorgan Chase, a bank, have given up trying to forecast what happens next. "We simply don't know how to model the endgame," they wrote on September 17th.

This is not the first time America has bumbled into a Middle Eastern quagmire. Over the past few decades it has tried just about every sort of military intervention in the region. It sent an enormous ground force to overthrow a dictator in Iraq, used air power to topple one in Libya, armed Syrian rebels and supported a Saudi-led coalition that went to war in Yemen in 2015.

Some of these succeeded at regime change but left chaos in their wake. Others failed outright. None produced an outcome beneficial to American interests. Still, the consequences were limited. The overthrow of Saddam Hussein was a disaster for Iraqis, who were plunged into years of sectarian bloodletting. By removing Iran's main regional foe, it freed the Islamic Republic to build its clout in Syria and Lebanon. But it had little immediate effect on America's closest allies in the region.

This war has been different. Outside Iran, the direst consequences have fallen on America's Gulf allies. Most will see their economies contract in 2026. They have lost hundreds of billions of dollars in forgone oil-and-gas sales, vanished tourist revenue and damage to infrastructure. They had hoped the MOU might allow them to get back to business in the fourth quarter. Instead they are quietly debating whether to once again postpone big events, from tech conferences to Formula One races.

Beyond the Gulf, the war has also triggered an energy shock felt around the world. And it has been uniquely unpopular among Americans. It took four years for 60% of them to call the invasion of Iraq a mistake. Mr Trump's war in Iran reached that mark in less than two months.

● Main US military sites, 2026

Sources: Congressional Research Service; Institute for the Study of War; AEI's Critical Threats Project

All of these factors will constrain America's future role in the region. Start with its allies. They have had sharp disagreements before: the Saudis urged George W. Bush not to invade Iraq in 2003, and Gulf states were unsettled when Barack Obama urged Hosni Mubarak, the longtime Egyptian dictator, to step down in 2011 (presumably, so was Mubarak). Those disputes might have led them to question America's judgment, but its commitment and its capabilities were never in doubt.

A whiter shade of red

Then came Syria. When Mr Obama failed to enforce his "red line" against Bashar al-Assad's use of chemical weapons in 2013, America looked indecisive; when it ultimately failed to overthrow the Syrian dictator, it looked weak. Doubts grew further after a string of Iranian-backed attacks against Gulf states—a strike on Saudi oilfields in 2019, a deadly drone attack in Abu Dhabi in 2022—elicited little response. Mr Trump wrecked whatever trust remained by starting the very Gulf war that America had long sought to deter.

No one in the Gulf is ready to openly discuss the future of American bases in the region (see map). "This is absolutely not the time for such a conversation," says one diplomat. Talk of closing some bases, many of which Iran has struck during the war, or even shrinking them, would make America look like it was abandoning allies at their time of peril. But the war is likely to spur America away from maintaining big, permanent facilities.

Its naval base in Bahrain, for example, was a rare "accompanied" post in the Middle East where troops could bring their families. It is unlikely to return to its previous size, when it housed close to 10,000 people. Before the war Qatar was ready to spend $10bn to upgrade al-Udeid, the base outside Doha that serves as the regional headquarters of America's central command. It is still willing to invest the money; whether the Americans want it is unclear.

Officials in several countries say they hope to negotiate new rules around how those bases might be used. They have already begun to impose ad hoc limits: Saudi Arabia scuppered an effort to reopen the Strait of Hormuz in May when it barred American warplanes from its air space. Elsewhere in the region, America is already on its way out. It finished withdrawing from bases in Syria this spring, and those in Iraq are due to be emptied by the end of September (both plans predate the war).

Its foes will have a say as well. Imagine a worst-case scenario: Mr Trump's war with Iran leads to a nuclear-armed regime able to exercise a veto over Hormuz traffic. In that case, America would struggle to ▸▸

sustain bases in the littoral Gulf states. At the other extreme, if the regime falls, there would be less need for them: a Middle East without the Islamic Republic would be one far less hostile to American interests.

However the war ends, Iran will not be America's only threat. Its era of maximum interventionism in the Middle East coincided with a stretch of relative calm elsewhere. Europe was mostly at peace; China was a rising power, not yet strong enough to challenge America in the Pacific. The "pivot to Asia", first proposed by Mr Obama, became a recurring joke in Washington: each pivot was a 360-degree turn. Yet the world looks far more dangerous today. The Pentagon can ill afford to tie up one-fifth of its aircraft-carriers in the Gulf or burn through hundreds of scarce interceptors and guided missiles fighting Iran.

Domestic politics will offer a further constraint. Not since Lyndon Johnson escalated America's role in Vietnam has a president so thoroughly wrecked his term with a foreign war. Mr Trump's would-be successors will take note. J.D. Vance, the likely front-runner for the Republican nomination, is a vocal sceptic of Middle Eastern wars. So are several of his possible Democratic opponents. Add to that worsening views of Israel: a Pew poll in May found that 62% of Americans had a negative view of the Israeli government, up 19 points from 2022. The pro-Israel consensus that helped shape American policy in the Middle East is fading.

Retrenchment is not retreat. America will retain interests in the Middle East. Counter-terrorism is a rare topic on which everyone can agree: when Islamic State menaced the Levant, even America and Iran found themselves fighting on the same side. A less engaged America might still carry out attacks on al-Qaeda and other groups. It will continue to sell weapons to allies, negotiate trade deals and sponsor peace talks. Military aid to Israel will probably endure for years, even though some polls show a plurality of Americans opposes it.

What will change is the idea of America as the region's security guarantor and problem-solver—that "we call Washington anytime we have a problem", as one Gulf official puts it. Recent events in Yemen offer a glimpse of what that means.

Mr Trump has not only rebuffed multiple requests from Prince Muhammad to launch air strikes in Yemen. His representatives also spoke in Oman with Houthi envoys, who promised to abide by a 2025 ceasefire and refrain from attacking American ships in the Red Sea. The latter might be a uniquely Trumpy flourish: it is hard to imagine other presidents cutting side deals with designated terrorists. But the reluctance to get involved will outlast him.

No one outside the region can fill the void. Europe is too weak. Asked for help by Saudi Arabia, Britain has offered a single aerial-refuelling tanker. Russia has neither the means (it is bogged down in Ukraine) nor the will (it has offered help to the Houthis, largely to spite America). It sees itself as a beneficiary of regional turmoil, not a candidate to end it. China has no recent experience of serious military operations beyond its borders.

That leaves regional countries, the strongest of which are its three non-Arab states. Iran has its missiles and proxies, while Israel has the Middle East's most capable army. In a sense, they are mirror images: strong enough to disrupt a regional order, not to build one. The third is Turkey, a military and diplomatic power that is also a growing arms exporter. It has intervened decisively in conflicts before. The rebels who eventually overthrew Mr Assad spent years under Turkish protection; Turkish troops repelled a warlord who sought to seize the Libyan capital in 2019. But the Turks are viewed with suspicion by Iran, Israel and many Arab states.

In the short term, the region will probably cleave into blocs, as Arab states align themselves with non-Arab powers. Long-term stability will require them to play a bigger role. To do that they will need better armies, stronger alliances and that most elusive of things: co-operation.

There are some early signs that they recognise the need for change—at least the stable, rich ones in the Gulf. Take their armies. Gulf states have spent decades buying expensive American military kit. Not all of it has been useful for the wars they wound up fighting.

As their shopping lists change, they will look for new suppliers. Iran has demonstrated the value of a ballistic-missile programme. Saudi Arabia cannot buy them

from America, but it has already obtained missiles from China (and may have used them against the Houthis this month).

Everyone in the Arab world is eager to buy drones from Turkey, a leading producer. Earlier this year the United Arab Emirates (UAE) signed a ten-year deal to purchase Ukrainian drones. The deal includes a co-production clause: they will build new factories to manufacture them. That fits with a growing push, in the UAE and elsewhere, to produce weapons at home.

They are also casting about for new allies. Since July Saudi Arabia has announced a mutual-defence agreement, with Pakistan and Turkey, and a maritime alliance to secure the Red Sea with more than a dozen countries. As military pacts go, these are vague and aspirational. The maritime coalition includes Bangladesh, which is 5,000km away and lacks a substantial blue-water navy. But they show the direction of travel. There will be more of these ad hoc coalitions. Some will be short-lived. Others might endure.

To strive, to seek, to find

Most of all, Arab states will need to agree on what sort of region they want. Before October 7th it was common to hear Gulf officials speak of a "new Middle East", one more focused on making money than waging war. It was a lovely idea, but an implausible one in a region full of intractable conflicts and inept governments. Today Saudi Arabia and the UAE cannot even work together in Yemen, despite the Houthis posing a danger to both. Neither the Arab League nor the Gulf Co-operation Council, a club of six petro-monarchies, has grown into useful institutions.

Such shortcomings were an inevitable consequence of the American era in the Middle East. America and its regional allies never shared a lofty agenda. There was no liberal-democratic project to bind them together, as in Europe after the second world war. Nor did America foster the sort of economic growth it pursued in Asia. It wanted simply to keep the oil flowing, protect Israel and maintain its bases (later it would add smashing jihadists to the list). None of these goals required Arab states to be capable or prosperous; in fact, some were easier if they were not. That was fine for its allies, which cared mostly about the preservation of their regimes.

It achieved all of those—for a time. But today its bases have been battered, its oil tankers are under attack and its closest ally, Israel, has been at war for three years. Even if Mr Trump had not rashly broken it, what America built over the past 35 years was not durable at all: too many of the region's states were weak, divided or failed ones. Without their longtime guarantor to fall back on, perhaps they will now have to build something better themselves. ■

Energy in Africa

Gambling on gas

ABUJA AND DAR ES SALAAM

Policymakers dream of a gas-powered future, but problems abound

To tell the story of African gas, Alain Ebobissé explains, he carries his "gas map" with him everywhere. The boss of Africa50, an infrastructure investment platform, produces a sheet of paper showing the world laced with pipelines. Africa is almost entirely blank (see map on next page). "Look at that!" Mr Ebobissé exclaims. "We have almost no pipelines, no infrastructure—it's terrible." Africa holds 13% of the world's natural-gas reserves, with deposits in 24 of its 54 countries and more still to be found. Yet it burns less than 5% of the gas used for power worldwide. Its pipeline network is one-tenth as dense as North America's. "Who is using that gas?" Mr Ebobissé asks. "It's not us."

Politicians, business leaders and investors across the continent hope that using more gas will spur industrialisation and growth. "The objective isn't just to produce more gas: the objective is to make sure that you have more productive economies across Africa," says Olu Verheijen, the energy adviser to Nigeria's president, Bola Tinubu. Volatility in global energy markets because of wars in Ukraine and in the Gulf, combined with a reduced focus on net-zero targets, has renewed interest in gas. But in Africa, it may not live up to the hype.

To its African champions, gas could solve many energy problems. Currently generating 14% of electricity south of the Sahara, the fuel could grow in importance as coal, the largest source at 40%, declines. Cheap solar power may prove a readier source of electricity for the 600m Africans who still do without. But the flexibility of natural gas means it is useful in almost every corner of a modern economy: as a heat source for steel plants and cement factories, and as a feedstock for fertilisers and petrochemicals. Liquefied petroleum gas (LPG) can replace dirtier kerosene and charcoal in household stoves. Compressed natural gas (CNG) offers drivers a cheaper, cleaner alternative to petrol and diesel. For big producers such as Nigeria, exports of liquefied natural gas (LNG) to Europe and Asia also bring in scarce hard currency.

Problems in the pipeline

Partly because sub-Saharan Africa lacks pipelines, processing plants, storage tanks and the like, the potential of gas remains largely hypothetical. Some 43% of what was produced in 2025 was shipped abroad rather than used at home. Of the natural gas Africa does consume, nearly half is used to generate electricity, a higher share than elsewhere. Just 17% goes to industry, compared with nearly 40% in South America and more than 30% in Asia. Only nine sub-Saharan African cities have piped gas, says Marc Howard of African Energy, a consultancy. New pipelines struggle to attract investment without guaranteed demand from buyers, such as gas-fired power stations, which in turn find it hard to raise capital without a secure supply of gas.

Could the current interest in gas change that? So far the promise is most encouraging upstream, where international energy firms including France's TotalEnergies and Italy's ENI are ramping up plans to draw more LNG from the continent. Multiple LNG projects are under way in Mozambique, home to Africa's third-largest reserves, including one worth $20bn which was stalled for years due to an insurgency in the country's north. In Nigeria, thanks to home-grown firms like Seplat and Oando, annual gas production could grow to around 11bn cubic feet a day—about 114bn cubic metres (bcm) a year—by 2030, according to Pranav Joshi of Rystad, a consultancy. Africa's total gas production in 2025 was an estimated 262bcm, up by 2.5% on the previous year.

Growing African demand for gas, particularly where countries are shifting away from dirtier coal, is beginning to spur investment further downstream, too. South Africa is accelerating plans to build gas plants, LNG import terminals and other gas infrastructure that could be worth $9.5bn in total, says Paul Eardley-Taylor of Standard Bank. Nivedh Thaikoottathil, also of Rystad, reckons that sub-Saharan Africa's total capacity for gas-power generation could reach 52 gigawatts (GW) by 2035, up from 26GW today, if new developments in South Africa and Nigeria, and smaller but strategically important projects in Mozambique, Tanzania and Ivory Coast, come online.

That is more than coal, with an estimated capacity of 35GW in 2035, but dwarfed by solar (140GW). It is also not guaranteed. Cash-strapped African utilities are unreliable customers for relatively expensive power from gas plants. The Natural Resource Governance Institute, a think-tank in New York, found that in Nigeria, now halfway through its "Decade of Gas" initiative, most new production is set to be exported—in part because the country's failing electricity grid limits what the government can buy from gas-power generators. "The real constraint is on distribution," admits Ms Verheijen.

Nor are upstream gas firms necessarily willing suppliers. In Tanzania and Senegal, negotiations with international energy firms have been hampered by disagreements over how much gas should be allocated to domestic markets, and on what commercial terms. "Why would they want to invest in a country that says it wants to cap prices, regulate prices, and take them outside the global market?" asks Jan Rosenow of Oxford University.

A few firms have managed to overcome the chicken-and-egg dilemma that bedevils investment in domestic gas infrastructure. Genser Energy, a Ghanaian operator, has laid over 400km of pipeline in Ghana, mostly to supply gas to gold mines. It has since built a natural-gas liquids terminal and gas-conditioning plant, and recently raised half a billion dollars to expand its portfolio of power projects in west Africa.

Gas-powered industrial clusters that are common in north Africa are also beginning to sprout below the Sahara. Lagos, Nigeria's commercial capital, "became an industrial hub because gas pipelines were available", argues Sumeet Singh of Powergas, which delivers CNG to businesses across the country. Reliable gas supply does indeed help explain why Sacvin, a plastic manufacturer with factories near Lagos, has expanded in recent years, says its managing director, Jogesh Khatwani. Bustling industrial districts on the outskirts of Dar es Salaam, Tanzania's biggest city, are powered by domestic gas.

In theory, the global gas crunch should multiply such effects by making it easier to raise capital for new African gas projects. The World Bank and other multilateral lenders have relaxed their rules on energy financing, allowing for the funding of gas as well as renewables. Armel Simondin, the boss of Perenco, an Anglo-French energy firm with projects across central Africa, expects this to "unlock projects that were completely blocked at some point".

But starting many projects at once is itself risky. A future global gas glut could expose higher-cost African producers to losses. Technological advances, such as longer-duration battery storage, could make gas uncompetitive with renewables, leaving some investments stranded. Long-term energy forecasts are unreliable—so a big bet on gas is a high-stakes gamble. ■

Africa's gas-pipeline network, 2025
— Operating/under construction — Proposed
Source: Global Energy Monitor

Ethiopia

Back to bloodshed

Heavy fighting in Tigray suggests the country is returning to civil war

Just a few years ago, between 2020 and 2022, a civil war was fought in Tigray, Ethiopia's northernmost region. Hundreds of thousands of people are thought to have been killed. The war pitted the armies of Ethiopia and Eritrea against the Tigray People's Liberation Front (TPLF), Tigray's ruling party. "Serious human-rights abuses" prompted America to impose an arms embargo on Ethiopia in 2021, and to put sanctions on Eritrea's army, senior officials and state-owned conglomerates. Thankfully, the crisis is at last over, at least according to American officials. On September 18th America removed the arms embargo on Ethiopia and did not renew the sanctions on Eritrea. "The national emergency [in Ethiopia] has expired," the treasury department declared.

That was curious timing. On September 23rd forces loyal to the TPLF seized control of three airports in Tigray, prompting Ethiopia's federal government to suspend flights to the region. The TPLF accused the Ethiopian army of launching an attack on southern Tigray and claimed its own forces had "entered a defensive war". An Ethiopian official said the TPLF had in fact "launched an all-out offensive" against army positions in neighbouring Amhara and Afar. At the time of publication, heavy fighting appeared to be under way in both regions, as well as in southern Tigray.

Tensions between the TPLF and Abiy Ahmed, Ethiopia's prime minister, have been growing for more than a year. The TPLF accuses Mr Abiy of putting Tigray under a punitive siege, part of a "genocidal" campaign against its people. Mr Abiy's government, meanwhile, says the TPLF is a "Trojan horse" for hostile forces bent on dismantling Ethiopia—chief among them Eritrea, with which Mr Abiy is also at daggers drawn. In recent weeks the Ethiopian army has waged an undeclared drone war against the TPLF. And in recent days that appears to have escalated into something approaching a second civil war.

If fighting continues, the latest round will be dramatically different from the previous one. Back then, Eritrean troops fought alongside the Ethiopian army against the TPLF. So did a set of militias from the Amhara region, to the south of Tigray, known as the Fano. Both the Fano and Isaias Afwerki, Eritrea's 80-year-old dictator, felt betrayed by Mr Abiy's decision to make peace with the TPLF in 2022. The Fano launched a rebellion against the federal government the following year. Mr Isaias, for his part, appears increasingly concerned about Mr Abiy's repeated threats to annex part of Eritrea's coastline.

On September 20th the TPLF and the Fano issued a joint statement with five other Ethiopian rebel groups, announcing that they had formed an alliance with the aim of toppling Mr Abiy's regime. Eritrean officials deny any involvement in the coalition. But Mr Isaias has longstanding ties to the Fano and is understood to have provided the TPLF and other groups with weapons and logistical support.

The prospects for de-escalation are slim. "The war has already started," reckons a former Ethiopian intelligence officer. The TPLF and the Fano appear to be trying to encircle Weldiya, a town in northern Amhara along the main road linking Tigray with Addis Ababa. If Weldiya were to fall, that could be a prelude to a rebel offensive on the Ethiopian capital. The rebels have also made incursions into Afar, where they may try to disrupt or even stop transport along the road to the port of Djibouti, on which Ethiopia depends for nearly all of its international trade, including fuel imports.

Mr Abiy has two big advantages. The first is that the rebel groups are individually quite weak and collectively riven by ethnic rivalries and historical grievances. That may hamper their ability to co-ordinate. Mr Abiy's other advantage is air power. The last time the TPLF stole a march on Addis Ababa, in 2021, the Ethiopian army beat it back with drones. Today Mr Abiy has an even larger and more sophisticated arsenal. In May one of the prime minister's advisers called for the TPLF's leaders to be assassinated by targeted drone strikes. "The TPLF leadership may not last the week," says a well-connected observer.

Yet Mr Abiy has other enemies to contend with. If Ethiopia's rebels falter, Mr Isaias may worry that he is next on the menu and order his troops to join the fight. Eritrea is also a crucial ally of the Sudanese Armed Forces (SAF), the national army of neighbouring Sudan, which is mired in its own disastrous civil war. The SAF, in turn, is angry with Ethiopia for backing its enemy, the Rapid Support Forces. That means the war in Ethiopia could spiral into regional carnage. "It's not going to be confined to Tigray," predicts a TPLF official. "It's going to involve Eritrea and it's going to involve Sudan." ■

Nigeria

Flying frenzy

ABUJA

Why state governments keep announcing their own airlines

IF EBONYI, A poor state in south-eastern Nigeria, is known for anything, it is for the paucity of its development efforts, from reducing poverty to improving literacy. That may be because the state government has been pursuing higher ambitions: it has been trying to build an airport. It says it spent some 50bn naira ($38m) on it between 2020 and 2023 alone, more than half of what it spent on education in the same period. The project has been marred by corruption allegations and vandalism. After a few flights, air traffic stopped because of a defective runway. Undeterred, Ebonyi's government is mulling the next step: launching its very own airline.

Nigeria's state-run airlines have a modest record, to say the least. The state carrier, Nigeria Airways, went bust in the early 2000s amid tales of unpaid salaries and rat-infested cabins. Of those run by state governments, three at least still operate (though only one is profitable). Ebonyi's proposal is a "joke", says Chris Aligbe, an aviation analyst. Yet state governors present plans to start their own carriers with some regularity. In July the governor of Kano, a northern state, said a local airline would start operating within the year "by the grace of God".

State governments are not best placed to run airlines, but a logic of sorts exists for their lofty plans. Nigeria is vast and has terrible road and rail networks, plus a big problem with bandits. Being accessible by air could be a boon for isolated states, especially if it makes them more appealing to rich investors and tourists from Abuja, the capital, and Lagos, the commercial centre.

Such hopes needn't be pie in the sky. Akwa Ibom, a state in the south, launched an airline in 2019. Ibom Air has helped turn the regional airport into an economic hub and claims to have boosted tourism. It now connects to six destinations outside the state, including Accra, the capital of Ghana, and is building a repair and maintenance facility for west Africa. The aim is to offer the sort of specialised repairs for which African airlines currently have to fly overseas. It is also profitable, bringing in 7bn naira ($5.3m) in profits in 2025. Officials in neighbouring Cross River state hope that their local carrier will tempt tourists to try the state's seafood and attend its annual carnival.

Yet the economic case for a local airline run by the state government is, in general, hard to fathom. Ebonyi's struggling airport is an hour's drive from the terminal in neighbouring Enugu state, which has ample capacity (and its own fledgling airline). Bayelsa, another state in the south, also wants to launch an airline, even though flights from Port Harcourt, 45 minutes across the border in Rivers state, serve it well enough (see map). Though airline capacity is rising, domestic air travel grew by a modest 4% last year. The market remains small, as few Nigerians can afford to fly.

Yet officials have reasons for their obsession with air travel. One is politics. Ebonyi's airport may be unusable, but the governor who had it built apparently impressed the president enough to be appointed infrastructure minister. Another is money. The federal government sometimes takes over failing regional airports and pays states generous compensation. Spending on airports and airlines is little scrutinised. Ebonyi's government says it has paid 50bn naira for three planes for its proposed airline. So far, there is no sign of any of them being delivered. ■

São Tomé and Príncipe

Pint-sized problems

SÃO TOMÉ

What a beer with no label says about a tiny African country

FOR CENTURIES São Tomé and Príncipe were known for chattel and chocolate. After the Portuguese landed on the islands in 1470 they brought enslaved Africans to toil on sugar *roças* (plantations). Portugal ostensibly ended slavery in the 1870s. But indentured labour on São Tomé and Príncipe continued, making it the world's largest cacao producer for a time.

These days, to understand Africa's least populous country after the Seychelles—and one that holds a general election on September 27th—grab a beer. Specifically, an unlabelled brown bottle made by Rosema, the archipelago's sole brewer. After independence from Portugal in 1975 the country became a Soviet satellite. East Germans helped set up the pilsner-making state entity. Rosema is known as *cerveja nacional*, a fitting name for a beer that quenches a thirst for post-colonial patriotism—and offers a window into the political economy.

There are few big firms in São Tomé and Príncipe. Dreams of an oil industry and a deep-water port are unfulfilled. But Rosema is always on tap. Since privatisation in 1995, ownership has rocked back and forth like a drunk, between an Angolan businessman and two influential local brothers. Much like a Congolese mine or a Nigerian oil firm, control can oscillate depending on who is in power. In the latest twist, in May the Constitutional Court returned the brewer to the Angolan, Mello Xavier, the fifth shift since 2018. It was seen as proof that Carlos Vila Nova, the president, is consolidating power after dismissing his rival in a palace coup in 2025.

The chicanery in the pint-sized country reflects its weak rule of law, shallow economy and patronage politics. "Beer is part of the lubrication of elections," says Alex Vines of the European Council on Foreign Relations, a think-tank. As polls loom, candidates are handing out gifts, including beer. Locals call it *tomando banho*, "taking a shower" (a sticky one).

At Cantinho da tia Cheila, a dusty-pink kiosk-cum-bar on the smaller island of Príncipe, Cheila, the eponymous owner, tips some beer on the floor before pouring one into a glass, a common ritual across Africa and in hip-hop videos from the 1990s. She says Rosema occasionally puts labels on the bottles but they slide off in the humidity. Still, it is cheaper than Portuguese imports and "it gives us pride in our land."

Her patrons agree. But like many barstool philosophers they dismiss politicians' promises, shaking their heads as noisy campaign vehicles pass by on the street. They know from experience: it is the hops that kill you.

Europe

Hybrid warfare

Russia ups the ante

PRAGUE

Europe will have to fight back against grey-zone provocations

RUSSIA'S CAMPAIGN of sabotage against Europe has escalated sufficiently that on September 18th Emmanuel Macron, France's president, summoned French party leaders and presidential candidates for a briefing on the threat of civilian casualties. "No one is safe," Mr Macron told them, according to *Le Monde*, a daily. The Russians, he said, aim to "break our support for the Ukrainians".

A day earlier Donald Tusk, Poland's prime minister, had cited intelligence that Russia intended to hit countries supporting Ukraine with drones or missiles, then claim the strikes were accidental. Russia wanted to "paralyse" NATO, he said, by testing Article 5 of its treaty, which pledges that an attack on one will be treated as an attack on all. A tepid response would cast doubt on that commitment.

Russia has been staging deniable provocations against European countries for many years. Since its full-scale invasion of Ukraine in 2022 they have increased. There have been incursions by reconnaissance drones, hacking, arson, parcel bombs targeting cargo flights and plots to kill executives of European arms firms. In recent months the pace appears to have risen again. The Russian operations have three main goals, according to security officials: trying to coerce European countries into halting their support for Ukraine; raising the costs of providing that support; and attempting to make NATO look powerless.

→ ALSO IN THIS SECTION

"It feels like we are moving from a series of grey-zone incidents into a continuous campaign," says Andrew Thomson, a British former diplomat who is now at Monarch, a German security firm. In just the week before Mr Tusk and Mr Macron spoke out, Italian jets on a NATO mission shot down an explosives-laden drone that entered Lithuania from Belarus, and others intercepted two Russian fighter jets that violated NATO air space. In the same week, Russian drones struck a train in Ukraine within 2km of a Polish border crossing, soon after Boris Johnson, a British former prime minister, had travelled through. In the Netherlands the railway network was recently disrupted by the co-ordinated placement of pipes on tracks.

More significantly, in August an explosive-laden drone was flown into a cargo plane used to transport weapons for Ukraine at Germany's Leipzig-Halle airport, though it failed to detonate. Germany blamed Russia for the attack and closed a Russian cultural centre in retaliation.

Not all such incidents are easily attributed. Many operations are designed to be deniable, and are thus termed "hybrid" or "grey-zone warfare". There are far more than are officially reported, says Mr Thomson. They often target critical infrastructure or defence firms, and include "accidents" that damage equipment, break-ins ▸▸

at sensitive sites and efforts to recruit agents. Individual incidents may appear random, but as a whole they show a pattern of disruption and intelligence gathering.

In many cases sabotage is conducted by local proxies or criminal gangs. Many may not know that their paymaster is Russia. The advantage of using freelance saboteurs is that it is harder to finger Russia's intelligence services. The disadvantage is that because they are not trained, they are more likely to bungle their missions.

"Ambiguity is part of the weapon itself," says David Cattler, a former NATO intelligence official now at the Centre for European Policy Analysis, a think-tank in Washington. Uncertainty as to what has happened makes it harder for countries to agree on a response. The incidents are calibrated to be large enough to have an impact but below the threshold that would prompt military action by NATO.

The havoc on the Dutch railways was a good illustration. Dutch authorities have not said whether the sabotage was linked to Russia or conducted by angry farmers, who had blocked roads during protests on the same day. Yet because Russia has been linked to other grey-zone incidents, it benefits from the fear and doubt even without being definitively blamed.

The key challenge facing Europe is how to respond. Many countries are taking defensive measures, such as installing protection against drones at airports and around other critical infrastructure. Some argue that Europe also needs stronger measures to raise the cost of hybrid attacks for Russia. It can retaliate by further restricting the number of visas issued to Russians, expelling diplomats, closing consulates, imposing harsher sanctions or seizing more Russian shadow-fleet tankers. The Baltic states are pushing for Europe to confiscate frozen Russian assets to fund Ukraine.

Others suggest Europe should pay Russia back in kind. Martin Jäger, the head of Germany's foreign intelligence service, said in February that the West needed to "more often prove that we would be able to do very similar things to make the other side also feel the pain". Actions, such as cyber-attacks, may already be under way. Some speculate that France may be doing something in the same vein as Ukraine, which is carrying out drone strikes in Mali against Russia's mercenary Africa Corps.

"What Moscow respects most is strength," says Mr Cattler. Unless Europe shows it is tough enough to deter provocations, Russia will continue to escalate. So far, its provocations have had no catastrophic results—but they might have done. Obstructions on tracks might derail a train. Drone attacks at airports could bring down an airliner. The riskiest approach would be to let Russia keep pushing until something cracks. ■

Germany

The zombie chancellor

BERLIN

His days are numbered. But no one is ready to finish him off

FRIEDRICH MERZ is breaking a string of unfortunate records. He is the least-liked German chancellor in polling history. His Christian Democrats and their Bavarian sister party (CDU/CSU), too, are skirting all-time polling lows. And on September 20th, in an election in the state of Mecklenburg-Vorpommern, the CDU was ejected from a state parliament for the first time ever, drawing below 5% of the vote.

For many in the chancellor's party, this last debacle, following a CDU wipeout at the hands of the populist-right Alternative for Germany (AfD) in the eastern state of Saxony-Anhalt earlier this month, has marked the point of no return. CDU campaigners in Berlin, which also voted on September 20th, report that locals only wanted to talk about their loathing for Mr Merz—who was not on the ballot. The stench of death surrounds his chancellorship. Yet although everybody can see the trapdoor beneath Mr Merz's feet, no one is ready to spring the lever.

In part that is because, if he goes, the scenarios look still worse. The governing parties do not want to precipitate fresh elections that would probably be won by the AfD. For the CDU/CSU to boot out the Social Democrats (SPD), the junior coalition partner, and rule as a minority government—a scenario reportedly considered in Mr Merz's office—would leave them hostage to the AfD in parliament. And switching the man at the top might look more tempting if the likeliest alternative, Hendrik Wüst, the CDU premier of North-Rhine Westphalia, Germany's biggest state, were not facing a re-election bid next April. In any case, the institutional barriers to such a *Kanzlertausch* make it risky. "If you pop your head out at this stage, someone will chop it off," says Wigan Salazar, a CDU member and head of MSL, a political consultancy.

This leaves Mr Merz oddly liberated to pursue what has become the signature issue of his chancellorship: seeing through a set of economic and other reforms agreed by his government in July. In a surprise address after polls closed on September 20th he vowed to pursue them with "backbone, steadfastness and patience". He added that they could be the antidote to the "authoritarian poison" he said was seeping into German politics (the AfD came first in Mecklenburg-Vorpommern and the hard-left Die Linke won in Berlin). Although the chancellor is prone to exaggerate the scale of his modest proposals, his dwindling band of supporters appreciate his commitment to them.

Yet navigating the reforms through the Bundestag will require a deftness of touch that has hitherto eluded the chancellor. The coalition enjoys a majority of just 12, and there have already been skirmishes over parts of the pension reform, the most ambitious element of the overall package. In July the government agreed to abolish a popular, and therefore expensive, rule introduced in 2014 that allows some workers to retire early on a full pension. Bärbel Bas, the labour minister and SPD co-leader, called the pension package a *Gesamtkunstwerk*, or "total work of art", implying backing for every element.

But Manuela Schwesig, the SPD premier ▶▶

Departure delayed

in Mecklenburg-Vorpommern, placed opposition to the proposal at the heart of her campaign, in which she ran the AfD a close second. Ms Schwesig is now a formidable force within her party, and a paper adopted this week by SPD MPs called the elections "a mandate to shape the reforms fairly". Sensing danger, CDU MPs have vowed to protect the agreement. Neither party's leadership has a firm hand on its parliamentary ranks. Ensuring that the pension rule will be abolished, as promised, will be a major challenge. So will votes on elderly-care reform and the budget for 2027. Each offers opportunities for restive MPs to cause trouble.

Ask around the CDU, and you can detect an anxiety that runs deeper than Mr Merz's woes. As populists grow on the left and, especially, the right, does the party that has long regarded itself as a unifying force as well as a governing power have any answer to the fraying of German politics? "We need something to fight for, rather than just fighting against everything," says one anxious party figure. Everyone agrees there can be no return to business as usual.

And yet no alternatives seem to be on offer, beyond hoping that the passage of time brings redemption. There are no more elections until April. In the meantime the economy shows signs of recovery, and Mr Merz will have plenty of opportunities to strut his stuff on the international stage. These may give him a few more stays of execution. Then what? ■

EU regulation

Wrapped in red tape

BERLIN

Europe's new packaging rules have small businesses up in arms

THE EUROPEAN UNION prides itself on being a regulatory superpower, setting standards that are adopted around the world. In some cases it works, as with the bloc's tight limits on pollutants. In others it flops, as with a complicated supply-chain law whose implementation has been delayed until next year. The EU's latest big new rule is the Packaging and Packaging Waste Regulation (PPWR), which came into force in August. Among other things, it will eventually ban single-use shampoo bottles used by hotels, and mini-sachets of ketchup or other condiments. However valuable its aspirations might be, much of it is, unfortunately, a bureaucratic mess.

The goals of the roughly 300-page-long PPWR are worthy. It aims to reduce the rapid growth of packaging rubbish, increase recycling, harmonise national laws and make food wrappers safer for consumers by restricting substances such as PFAS, widely used chemicals that break down slowly and are linked to cancer. Annually, each person in the EU generates 178kg of packaging waste, of which 68% is recycled. Plastic accounts for 35kg of that, and only 42% of it is recycled. Without the law, packaging waste is forecast to grow by 19% by 2030, driven by the relentless increase of online shopping.

Many of the law's new rules will be introduced gradually. Makers of packaging have until 2028 to introduce standardised labels showing the materials in their products and how to dispose of them. Single-use plastic packaging for fresh produce, and for those mini shampoo bottles or ketchup packets, won't be gone until 2030.

But other policies have become law immediately, and a few are creating chaos. Some aspects of the Extended Producer Responsibility (EPR) scheme, which makes manufacturers and importers responsible for the entire life-cycle of their products, caused an outcry among small businesses that export across the EU. The rules require them to register with individual national registries in each of the EU's 27 member states, hire 27 authorised representatives and file complex reports in different languages. That is a crushing burden for companies already struggling with high energy and labour costs.

The EU was aware of these concerns, but a proposal by the European Commission to suspend, until 2035, the requirement to hire local representatives was blocked in June in the EU council. Countries including Austria and Spain feared that removing local accountability would weaken regulatory control and make it easier for online sellers to ship across borders without reporting packaging data or paying recycling fees.

Hardly peanuts

EU, annual packaging waste, kg per person

*Without Packaging and Packaging Waste Regulation
Source: European Commission; *The Economist*

As a result, the PPWR became law with its flaws uncorrected. "It's completely absurd," says Marco Reitberger, who runs Itrade, a business-to-business electronics retailer with 35 employees in Passau, Germany. Before packaging his wares, his employees must complete a conformity assessment, prepare technical documentation and fill in an EU declaration of compliance. "Since August 12th we are obligated to throw away all the cardboard boxes that we get because we don't know their origin, rather than reuse them as we have always done," says Mr Reitberger. The rules, he says, are so confusing and expensive that no one is following them.

Many smaller European retailers have given up and paused sending their wares to other EU countries. Picadera, a small online shop for equestrian and leather goods, ceased deliveries to all EU countries outside Germany and Austria. Le Pop Lingerie, a seller of underwear in Cologne, says it will stop shipping other than to Britain, Germany, Norway and Switzerland because of the PPWR. Pitlock, a maker of cycling gear in Berlin, is pausing deliveries to other EU countries. "At its core the PPWR runs counter to the logic of the single market," says Andrea Wechsler, a German member of the European Parliament.

What can be done? Ms Wechsler proposes a threshold that exempts very small businesses in the EU from the obligations of the EPR scheme. She would suspend the requirement to appoint a local representative in each country, as the Commission proposed. And instead of 27 national registries there should be a single EU-wide one.

The parliament is set to debate small-business exemptions from the PPWR in October. The Commission suggested that, for now, national authorities reprimand rather than punish companies that violate the regulation. And on September 7th Germany's environment ministry proposed paring unworkable PPWR rules as part of an upcoming EU "omnibus" bill to lighten environmental regulation. The Germans want to lift some requirements for small businesses that produce less than ten tonnes of packaging waste a year.

In his decades of reporting on retailers, Mark Steier, an e-commerce blogger, has never seen them so outraged. "The PPWR is a total failure of the EU, national trade policies and national trade lobbies," he says. The problems with the new rules should have been evident beforehand. Yet it seems no one noticed they were broken until they took them out of the box. ■

Drugs in Italy

Too hot for the dons

ROME

Has the Mafia kept Italy fentanyl-free?

IN "THE GODFATHER", Don Vito Corleone refuses to engage in the heroin trade because he considers it "a dirty business". Outside of Hollywood scripts, such scruples are rare among mafiosi. Yet police in Italy are coming to the conclusion that a real-life version of this plot point may have played out there over the past decade. The country's mafias seem to have collaborated to keep fentanyl out of their territory.

The theory could help explain Italy's strangely low rate of fentanyl overdoses. In 2024 the synthetic opiate, which is about 100 times stronger than morphine, was detected in just two fatal intoxications in Italy. Germany had 95; America had almost 48,000. That cannot be explained by Italy's overall drug consumption levels. Some 2.1% of young Italian adults use cocaine in a given year, according to European figures, compared with 2.2% in Germany. Its estimated rate of high-risk opioid use is roughly twice the German one.

In 2024, with fentanyl starting to appear more often in Europe, Italy's government unveiled a plan to counter it. But Alfredo Mantovano, the top health-ministry official for drug policy, noted that the drug had not yet made much of an impact there. Police have made few significant seizures of fentanyl, says Nicola Gratteri, an anti-Mafia prosecutor. He concludes that mafias are staying away from the drug.

"If there is not a [fentanyl] epidemic, it's not thanks to police or politicians," says Roberto Saviano, an organised-crime writer whose book "Gomorrah" is considered a classic. "There is a veto by the mafias." Mr Gratteri and Mr Saviano say the drug's extreme potency and high lethality would be likely to trigger an aggressive response from law-enforcement authorities.

Moreover, drugs that kill their customers tend to be less profitable in the long run. For Italian organised-crime groups, that could threaten established heroin and cocaine markets. They seem to have decided that fentanyl brings unwanted attention and is bad for business.

There is no smoking gun: investigators have not produced wiretaps of Mafia bosses agreeing not to touch the stuff. But in July Vincenzo Molinese, commander of a specialised organised-crime group in the Carabinieri, Italy's military police, told a parliamentary commission that the evidence suggested they were steering clear of it. Such decisions would have to be made at the highest levels, says Mr Saviano: "We will have proof when someone tries to bring [fentanyl] in and is killed."

In any case, Italy's fentanyl-free zone may not last. In June 80 vials of the drug, enough for 20,000 doses, were stolen from a hospital in Rome. That prompted a security clampdown in medical facilities. Synthetic drugs offer enormous value in tiny quantities, dispensing with many of the complex logistics required for traditional intoxicants such as cocaine. Street demand for fentanyl is emerging. Eventually, says Mr Saviano, new groups seeking to gain a foothold will supply it. As Don Corleone says, when he eventually agrees to let drugs be traded in his territory: "When did I ever refuse an accommodation?" ■

Russian sanctions

Surrendering under pressure

France gets the EU to lift sanctions on a Russian oligarch, at Azerbaijan's behest

ON SEPTEMBER 22ND France accomplished something that Viktor Orban, Hungary's former leader, had attempted for years without success. It strong-armed the European Union into lifting sanctions on Alisher Usmanov (pictured), a Russian-Uzbek oligarch with close ties to Vladimir Putin. French diplomats said they wanted Mr Usmanov spared for reasons of "national security". In fact, getting the oligarch exempted was a condition of a secret deal France had negotiated with Azerbaijan to release French citizens it had detained.

Mr Usmanov was removed from the sanctions list along with Mikhail Fridman, a Russian oligarch. After France made its demand, Luxembourg had taken the opportunity to tack on Mr Fridman, who was pursuing an arbitration case over frozen assets that could have forced the micro-state to pay him $16bn. With the entire package of Russian sanctions scheduled to expire the following day unless it was unanimously approved by the EU's member states, the rest of them caved in.

What Alisher wants, Alisher gets

Why Azerbaijan was so devoted to Mr Usmanov is not clear, though he is said to be friendly with Ilham Aliyev, the country's strongman president. But Azerbaijan's desire to squeeze concessions out of France stems from the increasingly bitter animosity between the two countries. France is a long-time backer of Armenia, and Emmanuel Macron, the French president, vocally supported the country during Azerbaijan's recent wars against it. After the Armenians' defeat in 2023 France began selling them weapons.

Mr Aliyev responded by attacking French "Azerbaijanophobia". His government established the Baku Initiative Group (BIG), an outfit nominally dedicated to fighting neocolonialism, though it concentrates on French and formerly French territories. The institute is part of a "cognitive-warfare" effort to paint French and EU criticism of Azerbaijan as hypocrisy, says Sossi Tatikyan of the Yerevan Centre of Foreign and Security Policy. In 2024 independence activists in New Caledonia, a French overseas territory in the Pacific, were seen with Azerbaijani flags and T-shirts sporting BIG logos. Mr Aliyev declared his solidarity with the separatists, and the boss of a local think-tank wrote of "Azerbaijan's pivot to the Pacific".

The country also began to treat detained French citizens as bargaining chips. At least one has been let go since the EU dropped its sanctions on Mr Usmanov: Martin Ryan, a British-French dual national convicted of espionage. Another French national whom Azerbaijan might release is Anass Derraz, a water-company executive. Ironically, he was arrested on charges of helping a different Russian oligarch evade sanctions, allegedly in concert with Alexandre Benalla, Mr Macron's disgraced former head of security. Mr Derraz denies the charges against him.

The exceptions for Messrs Fridman and Usmanov show that European countries, though they present sanctions as a matter of collective security, are open to deals. Other oligarchs will try to bargain as well. To prevent that, the EU agreed that the current renewal is valid for three years, up from six months. Russian oligarchs doubt it will hold. Andrii Sybiha, Ukraine's foreign minister, spoke of "the humiliation of the EU". France has struck a blow against Europe's credibility. ■

CHARLEMAGNE
Red alert!

Europe's populist left is on the march, slowly

FOR A MOVEMENT predicated on historical inevitability, communism is taking an awfully long time to triumph in Europe. It has been nearly two centuries since Marx and Engels proclaimed the bourgeois goose cooked. Somehow the capitalists have contrived to retain control over the commanding heights of the economy, and even reclaim them in bits of central Europe that had fallen under the Soviet yoke. This dearth of revolutionary momentum is not for lack of zeal among the true believers on the populist left. Two dozen parties wed to class-struggle ideology across Europe have kept themselves busy mounting barricades, calling for strikes and organising seminars on the true nature of colonialist patriarchy. Despite their efforts the dictatorship of the proletariat remains as distant as ever. If a spectre haunts Europe these days, it is of the populists at the other end of the spectrum, those on the illiberal right, who seem to be making more tangible progress towards overturning the established order.

Yet if the downtrodden have yet to seize much beyond the occasional committee room, the political faction on the left of the left is having a moment. On September 20th comrades across Europe cheered as Elif Eralp of Die Linke, the German party of red-flag wavers, came top in state elections in Berlin. Granted, Ms Eralp, whose parents migrated to Germany from Turkey, was offering merely to clobber private landlords and turn the capital into a "city of solidarity" rather than seize the means of production, but still. In Sweden the Left Party (once known as "communist", it dropped the moniker in 1990) did well enough in national elections this month that it will be needed for the centre-left to secure a parliamentary majority. At European Union confabs, these parties' future ministers may bump into fellow travellers from Spain, where the populist left is also in government. It may not be Greece in the late 2010s, when Syriza ran the country (into the ground), but in many places the reds are doing all right.

The populist right has enough political oomph to scare centrists into wondering what might happen should more of them come to power. In contrast, their left-wing counterparts often have all the electoral menace of a revolutionary poster peeling from a student-union wall. The Left group in the European Parliament, a rough proxy of influence across the EU, counts 46 members in a chamber of 720—behind three centrist factions, ecologists and the populist right. Yet the movement's modest electoral success belies its influence. Besides being a potential coalition ally, it can act as a spoiler. In France, for example, Jean-Luc Mélenchon, the cantankerous leader of Unsubmissive France now on his fourth presidential run, has no chance of winning the election in April. But polls show he might be the runner-up in the first round. Such an outcome would be a godsend for Marine Le Pen, the right-winger who is far ahead in the polls. She faces a tight run-off against any centrist candidate, but would handily beat Mr Mélenchon. He could, indeed, change France—by bringing the populist right to power.

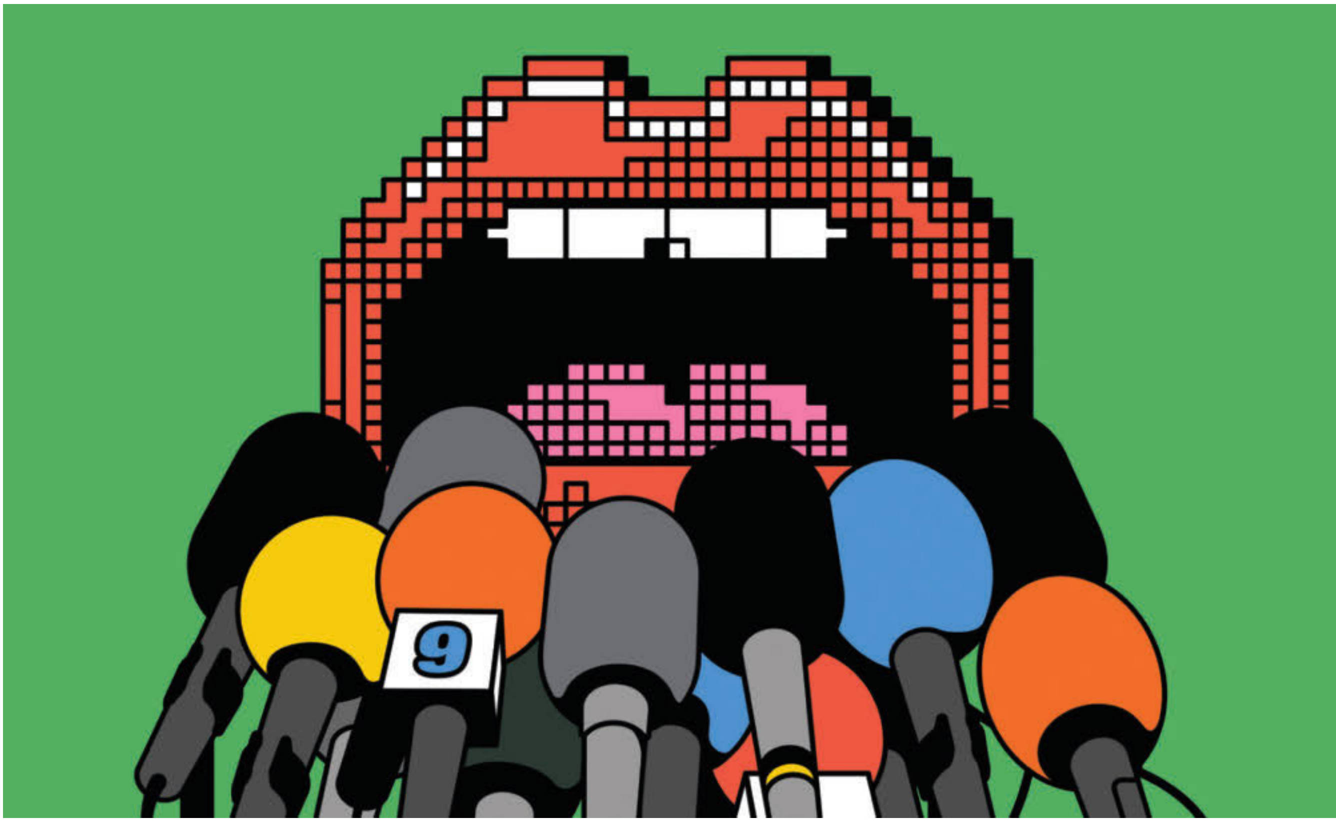
Even as most voters still plump for pro-capitalist outfits, parties on the populist left feel they have the revolutionary wind in their sails. In many countries they have tapped into outrage over Gaza. Confabs of hard lefties feature more Palestinian flags than hammer-and-sickles these days (the ensuing Israel-bashing sometimes carries a whiff of antisemitism). The same political fragmentation that has helped the likes of Ms Le Pen has played into the hands of the left, too: gone are the days when big-tent parties could unify broad swathes of the electorate under a single awning. The rise of the populist right—or "heirs of Nazism" as they are described by their foes on the left, themselves often the heirs of Stalinism—has given the Euro-tankies something to rally against. Concerns over the cost of living are top of mind for Europeans, and parties proposing rent controls, austerity-busting budgets and a rhetorical guillotining of billionaires resonate with voters feeling the pinch. The actual guillotining can wait.

Alas, on much else they disagree. For all their internationalist aspirations, the parties on the populist left have a tough time gelling into more of a sum than their parts. Partly this is historical: parties that seem like an indistinguishable lump of communism to outsiders are often a byzantine warren of rivalries pitting Lenino-Marxists against Maoists, Trots against post-communists. (The last French presidential election in 2022 included four such factions.) In the days of the cold war many communist parties simply copy-pasted directives from Moscow, giving their creed a certain coherence. Today, not so much. The populist-left parties across Europe "share certain core values but they interpret them differently", says Luke March of the University of Edinburgh. Some still laud Russia—old habits linger stubbornly—while others have moved on. Is the EU a neoliberal club oppressing workers, or the only way for the *lumpenproletariat* to shake off dependency on imperialist America? Ask two lefties and you will get three answers.

Splitters!

Still, spectres die hard. What might justifiably haunt the rich is the idea that time is on the side of the populist left. Its success among the youth in Germany and France is striking. In Berlin Ms Eralp won around 45% of voters aged under 35, more than triple the score of the next political faction. In France the populist left is even further ahead, polling at nearer 50% of under-24s. Whereas the populist right is doing well in rural areas, their rivals on the left seem to have captured the urban crowd. Unsubmissive France is the default choice of many a student at prestigious universities, ie, tomorrow's elite. In time, some of the youngsters will mellow into centrists—starting to pay tax has that effect. If they don't, Marx may yet have, if not the last laugh, at least a chuckle. ■

Britain



Sounding robotic

AI speeches are taking over politics

British MPs are avid users. But they have nothing on Australians or Canadians

STEVE YEMM put "a fundamental question" to his fellow MPs this June. "Who is shaping whom? Is technology serving society or is society being reshaped to serve the interests of technology companies?" Onlookers may not have realised quite how intimately technology had shaped that particular intervention. Pangram, a tool for detecting text written by artificial-intelligence models, flagged Mr Yemm's speech as entirely AI-written.

Unusually, Mr Yemm freely credits his machine co-author. He tells *The Economist* that "my office uses general-purpose AI productivity tools within parliamentary guidelines" for many tasks, including preparing speeches. He is hardly alone.

Our analysis, using Pangram, finds that one in ten of the words spoken in Britain's parliamentary debates are drafted by AI (see chart 1 on next page). That share is rising, from near-zero in 2024. Other MPs are less willing to fess up. The most common response of Parliament's most prolific AI users was surprise and denial. One MP, a quarter of whose speeches appear to be AI-written, denied using the technology at work. He added that he and his parliamentary assistant "do have a bit of a running joke, though, that his writing style often uses some of the AI-generated tropes".

Britain is not unique. Across English-speaking legislatures, the heaviest AI-users are Australian and Canadian MPS, whose speeches get flagged at triple the rate of British ones (see chart 1, right-hand panel). American House members are not far behind. The House of Lords, despite its fusty image, uses more AI than the Commons. The lowest-AI chambers sampled were the New Zealand House and US Senate.

Rob Jetten, the Dutch prime minister, was embarrassed earlier in September when the *Volkskrant,* a daily newspaper, revealed that many of his social-media posts, including a plane-crash commemoration and a post-colonial apology, were AI-authored. Mr Jetten was unapologetic and plans to continue. Another recent analysis found that one-third of the laws proposed in Norway's legislature contained AI text.

For now, AI prose juts out painfully. Chatbots reliably reach for the same few formulas. "It was not simply a tattoo; it was a promise" (said one MP, remembering the Hillsborough stadium disaster); "the government are not reforming NHS dentistry; they are supervising its managed decline" (said another, about dental deserts).

Rather than merely spotting iffy constructions, AI-detection tools are trained on vast databases of text, like the models they sniff out. Pangram now touts just one-in-24,000 false positives. Researchers at the University of Chicago similarly found a "near-zero" error rate on longer text. On parliamentary data, it flags vanishingly few speeches from before the release of ▸▸

ChatGPT in November 2022.

More than half of British MPs barely use AI for speeches. But those who do tend to be prolific (see chart 2). Many are from the newest intake, first elected in 2024.

The MP who uses AI most, we find, is Neil Shastri-Hurst, a Conservative. Three-quarters of his parliamentary contributions over the past year were flagged as AI-written. Alex Easton, a Northern Irish independent, is not far behind, nor are Mr Yemm or Sarah Hall, both of the Labour Party. Ms Hall said that AI was "an assistant, not...a substitute" and that, for every half-hour saved on speech-writing, "that is another 30 minutes we can put into supporting my constituents."

Among backbenchers, the major party with the highest rate of AI in its speeches is the Liberal Democrats. Speeches by party leaders and ministers, with better-resourced and more-scrutinised speechwriting teams, rarely seem to be AI-written. None by Kemi Badenoch, Andy Burnham, Sir Ed Davey, Nigel Farage, John Healey or Ed Miliband had any material AI input.

That caution is probably wise. Polling for *The Economist* by Public First, a consultancy, finds that British voters strenuously disapprove of politicians using AI to write, though they are happy for marketers, assistants or even teachers to do so. Voters also disliked AI use in speeches more than any other sort of political writing, even personal notes of condolence to constituents. The next-most-unpopular category was AI-written policy papers, which have also proliferated in Westminster. Each party's supporters saw sin elsewhere. Green, Labour and Tory backers reckoned that Reform UK's Mr Farage was the party leader most likely to use AI in speeches; Reform voters guessed it was the Greens' Zack Polanski.

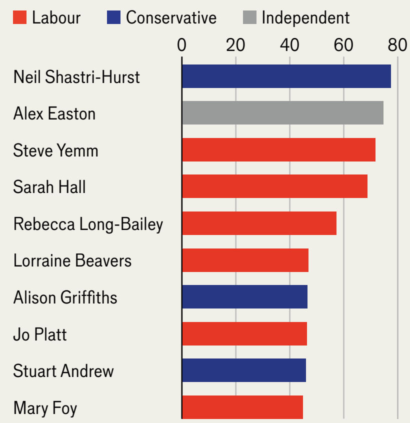
Neither politicians nor AI are especially popular, so hostility to AI speeches, which combine the two, ought not be a vast surprise. But the public's ire is understandable. Voters elect representatives to speak for them in Parliament, a word that comes from the French for "talking-shop". These debates are seldom the summit of oratory. Today there is an unseemly focus on angling for social-media clips, and actual speech-writing is usually left to staff. Still, dodging the work of crafting an argument risks automating away what MPs are elected to do. And concern about robo-prose is not confined to politics (see next story).

"Sloppy speechwriting will get sloppy politics," frets Alan Lockey, once a speechwriter for Sir Keir Starmer, until recently the prime minister. "We disseminate ideas through our writing. This isn't Google Maps and the Ordnance Survey, this is big-boy stuff now. This is fundamental to our historic culture."

Futurists have speculated that politics might be the rare impossible-to-automate profession, perhaps like the priesthood. (Although earlier this year the pope did have to urge clergymen not to use AI to write homilies.) Surely people want to be represented by people, not machines? But as time-strapped MPs reach for chatbots, AI is already building a bridgehead. ■

Superusers 2

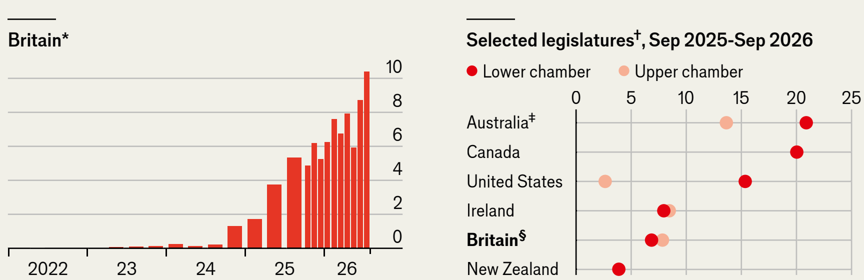
Britain, top ten MPs by % of text in parliamentary speeches* flagged by Pangram as AI-written or -assisted, Sep 2025-Sep 2026



*In House of Commons and Westminster Hall, among MPs who have given at least ten speeches in the period
Sources: Hansard; TheyWorkForYou; Pangram; *The Economist*

Representative democrAIcy 1

AI-written or -assisted text in speeches, %



*In House of Commons and Westminster Hall, speeches over 100 words. Quarterly estimates from random samples until Q3 2025, then all speeches scanned †Random samples of speeches over 100 words, in English ‡Incl. Federation Chamber §Incl. Westminster Hall
Sources: Hansard; TheyWorkForYou; Pangram; parliamentary records; *The Economist*

English literature

AI writes and wrongs

Artificial intelligence makes lots of writing worse. (Even if it makes it better)

WRITING USING artificial intelligence is everywhere. It has crept into elite newspapers (the *Wall Street Journal* ran an op-ed drafted by it) and elite publishing houses (Grasset in France finds itself defending a star author accused—falsely, he claims—of using it in a prize-winning novel). It is in the speeches of British politicians (see previous story), in the homework of British students and abundantly there in LinkedIn posts (41% of longer ones, according to a study by Pangram, a detector, use it). Ask Gmail to draft a love letter to your partner and it will instantly offer up "My Dearest [Husband's Name]...". It is quick. It is not quite Keats.

Who cares? The reactions show that people do care. AI-spotting has become a mania. Prose is being scrutinised with the attention, and jargon, once reserved for Latin literature. Arcane rhetorical terms like antithesis and epanorthosis (the "not X, but Y" construction) and tricolon (three-fold things, like "*veni, vidi, vici*") are bandied about by social-media users with the verve of Ciceronian scholars. Literary criticism has rarely been so hot.

The em-dash, the most notorious AI "tell", seems to be acting as—another rhetorical word—a synecdoche, the term for when writers use a part for the whole, like "wheels" for "car" or, perhaps, "em-dash" for "the intellectual obsolescence of the human race". This, says Maryanne Wolf, an emeritus professor of neuroscience at UCLA, is not a battle over punctuation. It is a "battle for our minds".

AI is so "unprecedented", says Steven Pinker, a professor at Harvard, that we cannot tell how, or whether, it will affect the English language. Happily there is a body of evidence dating back a few years (about 1,300) on what good writing is. It is called "English literature".

The first thing that a millennium of English writing shows is that most people are terrible at it. They find it painful to do ("like a long bout of some painful illness", as George Orwell had it) and produce words that are almost as painful to read. AI can be bad; humans are often worse. Dan Brown offered: "His eyes went white, like a shark about to attack." William Wordsworth offered an ode to a spade (it began "Spade!"). Lee Child offered the phrase: "It was about as distinctive as the most distinctive thing you could ever think of."

AI, by contrast, writes with the ease of ▸▸

the easiest thing you could ever think of. It can write a sonnet in half a second, a 1,000-word article in ten seconds, an Austen-length novel in half an hour. And though it can be bad, it often isn't. In a recent blind tasting of two short stories, one human-written and one AI-written, researchers from the University of Villanova found that respondents rated the AI story as "higher quality and more absorbing".

Yet English literature also shows that writing is not just the act of spewing words onto a page. Writing, as writers point out, is no more merely words on the page than a smile is joy, or a tear is sorrow. Real writing is not writing at all. It is thinking; specifically it is thinking: "What do I think?"

Often "you only really know what you think by writing it," says Emma Smith, a professor of English at Oxford. For how, as a character quoted by E.M. Forster puts it, "can I tell what I think till I see what I say?" When Michael Gove, the editor of the *Spectator* and an ex-MP, was in the cabinet he told his underlings to "Think in ink." To make a good argument you need to have followed its logic "step by step"—in writing. Those who use AI to write speeches are, he says, using "counterfeit currency".

But counterfeit currency is always disliked; AI writing is not. Few would object to someone using AI to contest a parking fine, fill in a tax return or for a second-language speaker to polish their English. If a company uses AI to announce a new parking policy, few care. But, says Colleen Kirk, a professor at the New York Institute of Technology, if that policy was problematic and the company apologised using AI—then "You've got a big problem." You risk activating "moral disgust".

In 1970 a Japanese robotics expert, Mori Masahiro, noted that the more human a robot looks, the more affinity humans feel for it—until it becomes too human, whereupon affinity turns to revulsion: the "uncanny valley". If you shook someone's hand in a darkened room and, unexpectedly, clasped a prosthetic hand you would, Mori wrote, "shriek". AI writing—bland, plasticky, human-ish—seems to sit in the "uncanny valley" of prose. It certainly makes social media shriek.

So here is the AI paradox. AI prose is easier to produce and often better than human prose. Yet humans do not like it; they may impair their ability by using it and they often loathe its use by others. This may be ridiculous but is encouraging. As humanity destroys its intellectual dominion with its own intellect—as it is beaten back in chess, in Go, in coding—we retain one last advantage: we are human. And, for now, humans (often) prefer to read humans. So make the most of that and, as E.M. Forster also said, "Only connect". And probably write personal emails yourself. Especially to your "[Dearest Husband]". ■

London theatre

Enter, centre stage, John Maynard Keynes

A star-studded new play brings back an old star economist

"IN THE LONG run, we are all dead," John Maynard Keynes famously quipped, impatient with waiting for economic downturns to correct themselves naturally. The British economist argued that governments should step in to fix short-term crises. "The Standard of Living", a new play which opened for previews on September 21st at the Theatre Royal Haymarket in London, takes a fresh look at Keynes's legacy.

Written by James Graham, author of "Dear England", a hit drama about football, and directed by Nicholas Hytner, this is a timely piece of theatre. Keynes (played by Rory Kinnear) is surrounded by the Bloomsbury group—Virginia Woolf, Lytton Strachey and others—and married to a ballerina, Lydia Lopokova (Natalia Osipova), despite his homosexual past. The play traces his professional arc from work at the Treasury, the publication of "The Economic Consequences of the Peace" after the Treaty of Versailles to establishing funding of the arts in Britain before his death in 1946.

Keynesianism remains as relevant today as ever. His view that governments should spend more to prop up demand during crises has dominated policymaking in recent years, most notably in the lavish support schemes run during the pandemic and its aftermath. Yet this approach has had its critics (just as, in his time, Keynes clashed with Friedrich Hayek, who argued that government control over the economy is a slippery slope, ultimately undermining the free market). Covid-era spending has left countries saddled with huge debts. And the energy-price shock caused by the wars in Iran and Ukraine is a reminder that when the trouble lies with supply, demand-side measures are inadequate.

The action takes place against the background of momentous events, from economic depression to world war. Keynes believed economics had a moral purpose, to enhance people's lives. He seized his chance to help shape the post-war world. In July 1944 he led the British delegation at the conference in Bretton Woods, New Hampshire, which set up the IMF and the World Bank.

Live theatre brings immediacy and immersion. Sitting on a faded velvet chair in the dark, amid almost 900 people, you follow the life of someone who died 80 years ago. Again and again Keynes talks about "the good life"—where wealth provides the material prerequisites for human flourishing but does not constitute the good life itself. Mr Graham's stimulating play will make audiences wonder what the good life could mean now.

The good life

BAGEHOT
The pointless party

Liberal Democrats are getting better at politics but have lost their purpose

"FOR YEARS from afar I have respected the Lib Dems for their Socratic dedication to doubt." That declaration by Emily, a new member of the Liberal Democrats addressing the party's annual conference in Brighton this week, sums up the appeal of the outfit—and its problems. The party wins seats. Its "dedication to doubt" is attractive in an age of misplaced certainty. But that is not an agenda for power.

Two years ago the Lib Dems regained their position as the third-largest grouping in Parliament. The 72 seats that they captured, under the leadership of Sir Ed Davey, was their best result ever. It was a welcome relief for a party which in 2015 had teetered on the edge of extinction. They were left triumphant—yet irrelevant. Labour's large majority in the House of Commons means that whether Lib Dems vote with or against the government matters not a bit. Meanwhile populist insurgents, Reform UK on the right and the Greens on the left, dominate the online discourse. A Londoner named Hannah told a recent focus group organised by More in Common, a pollster: "I think my algorithm has decided that I don't need Ed Davey in my life because he just has not come across my screens at all."

And because the Lib Dems are irrelevant, they are getting antsy. In Brighton MPs and activists grumbled about the failure of the party to make waves. "Stability is good, but you have to do something with it and we haven't, so it's dull," one MP complains. Members hailing from areas outside the party's electoral heartland in the south of England ask why it is not benefiting from the general unpopularity of Labour, as it did in the past.

They have a point. The Lib Dems secured 12% of the vote at the last general election, and have stayed at that level in the polls since. Voters flip at record speed, throwing parties high and casting them low—except the Lib Dems.

Many party activists are permanent pessimists. The Lib Dem "glee club", a lo-fi singalong which takes place on the last night of conference, still features songs complaining about the merger in 1988 between the Liberals, the historical party of free trade which once dominated British politics, and the slightly more lefty Social Democratic Party. This newspaper reported at the time of the merger talks that Liberal hardliners "would rather be in a no-hope party" than accept political compromises. That sentiment lingers among many of the party faithful.

They should cheer up. Their situation is not all that bad. The Lib Dems keep making gains at local elections (in Richmond, a wealthy patch of suburban London, they won every single one of the council's 54 seats in May). Sophisticated seat-by-seat polls suggest that they are in a position to more or less match their record-breaking performance from the last general election. The party is a well-honed machine optimised to perform powerfully in elections even when its national polling position is unpromising.

The real problem for the Lib Dems, and what they should indeed worry a lot more about, is that they seem to have little idea what they want to do with the power they chase. They excel at elections; they have no plans for office. The party is rather like a computer which has been programmed to beat humans at chess: it is getting better and better at the game, all the while being incapable of understanding why it is playing in the first place.

Sir Ed offers up a ragbag of policy ideas—some decent, others awful—with little connecting thread between them. Going into the conference, his big promise was a hefty cut to fuel duty, a blunt giveaway to motorists which makes a mockery of the Lib Dems' pretensions to be environmentally friendly. Other policies are simply pointless: the party recently demanded a new law mandating that ten Premier League games per season (out of 380) be shown on free-to-air television. Call it middle-class populism.

This is depressing stuff for those who want a truly liberal option on the ballot paper. The party does have a strong heritage of radical centrism. Paddy Ashdown, leader in the 1990s, thundered against the "clammy embrace of corporatism" in Britain's public services (it has only got worse). Writing in 2004, one rising star had a host of interesting ideas for remaking the state: introducing a local income tax, slashing the number of Whitehall departments, giving teenagers vouchers to pay for their education rather than funding it through central government. The name of that novel thinker? Ed Davey.

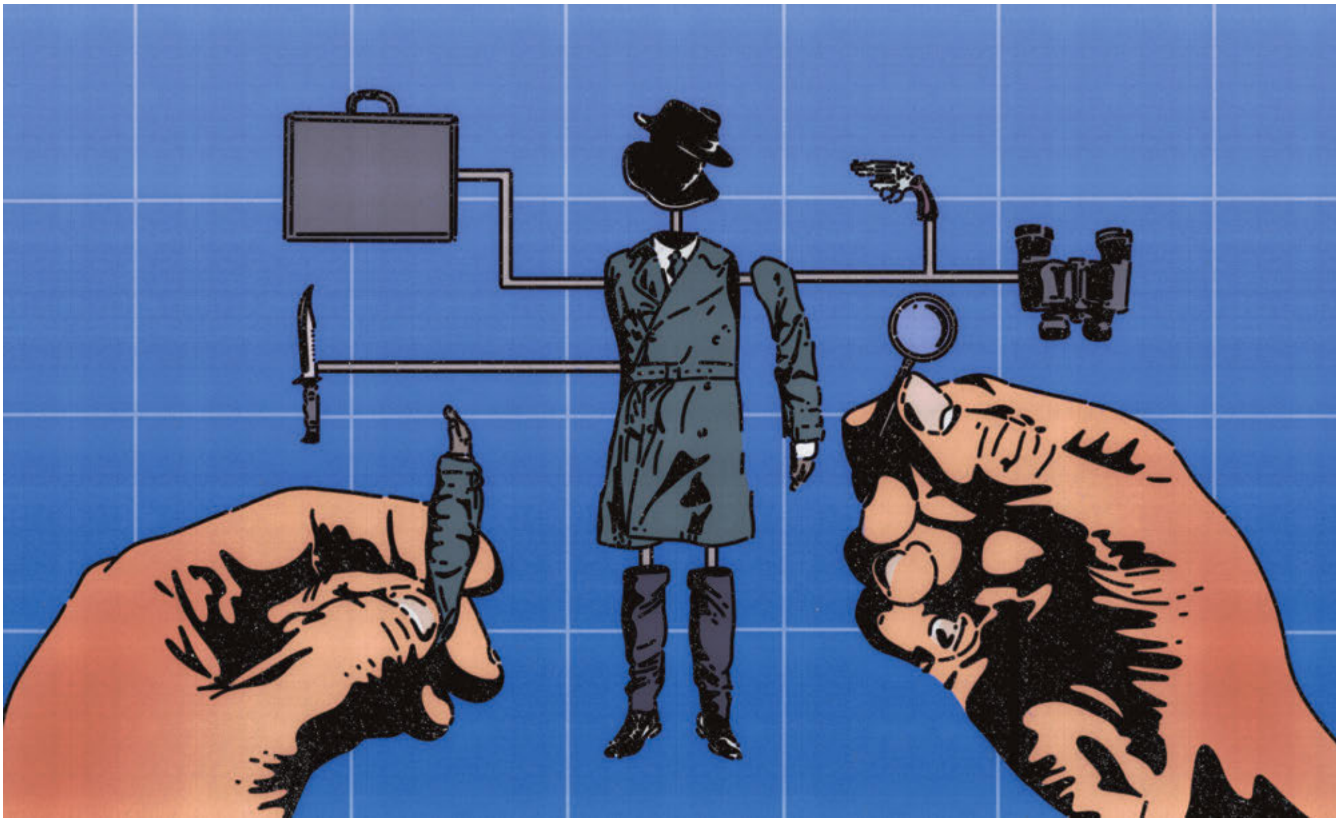
It's not all bad. In his closing speech to the conference on September 22nd Sir Ed set out a policy of cutting income tax, including for the higher earners who have been particularly clobbered by Tory and Labour governments in recent years; he had previously failed to explain whether he wanted the state to grow or shrink. And he is inching closer to a bold policy of rejoining the European Union, a move the party leadership had been squeamish about in case it alienated some voters.

Still, there is a long way left to go. The Lib Dems give little indication of what a distinctively liberal approach to education, health, defence or technology policy would mean. It is tempting to ask: who cares? After all, there is a case that the party has never been so successful, yet never so unimportant.

Davey, Davey, give me the answer do

Yet the case for the Lib Dems ought to matter. With Britain's politics in flux, and Sir Ed's mastery of electoral tactics seemingly solid, there is every chance the Lib Dems will be the junior partner in a coalition government by the end of the decade. As Tim Leunig, an economist who is the Lib Dems' most interesting thinker, puts it: "If you are as close to power as we may be, you have to be serious about it." The chess-playing computer needs to become conscious. The Liberal Democrats must decide why they exist. ■

International



Spy games

More cloaks, more daggers

PARIS AND TOKYO

Europe and Japan rebuild their intelligence services for a hostile world

BRUNO KAHL was certain that the Russians would not invade. The then head of Germany's foreign-intelligence service arrived in Kyiv on February 23rd 2022, to meet Ukraine's leaders. He never saw them. Around 4am the next morning Russian forces lunged for Kyiv. Mr Kahl had to be exfiltrated from his hotel, with the help of allied spooks, weaving through the throng of refugees heading for Poland.

He embodied the haplessness of most European intelligence services in their greatest crisis since the end of the cold war. French spooks also flubbed the invasion, forcing the resignation of the military-intelligence chief, General Eric Vidaud. They and others disbelieved America's and Britain's warnings of an impending Russian attack, but lacked the wherewithal to check for themselves.

No longer, or so they hope. Middle-power democracies are now reshaping their intelligence services for a more hostile world. Most notable are countries that for decades neglected spying, trusting instead in pacifism, neutrality, remoteness or Uncle Sam. Japan is building an espionage apparatus almost from scratch. Sweden is creating a new civilian foreign-intelligence agency. Canada is debating whether to have one, too. Germany hopes to give its spooks broader authority. The Netherlands is set to hand its own spies more powers. Above all, spies are working more closely with foreign friends. "Co-operation among European intelligence services has reached unprecedented levels," says Nicolas Lerner, head of the French external-intelligence service, the DGSE.

One aim of the overhaul is to counter spying by autocratic foes. Another is to curb "grey-zone" attacks by Russia, such as an explosives-laden drone found recently at Leipzig airport (see Europe section). Countries also need early warning of actual war, given the worries that Russia might turn on NATO or that China might invade Taiwan. And if war does break out, countries will need better military intelligence.

Underlying everything is President Donald Trump's disdain for allies. His suspension of intelligence for Ukraine last year, albeit brief, set off alarm bells. At least one ally is making contingency plans in case America severs intelligence-sharing, says a former American intelligence official. Indeed, some worry America itself could be a direct threat, given Mr Trump's trade war and musings about annexing Canada, Iceland and (until recently) Greenland.

Britain helped build the spy services of countries of the "Five Eyes" intelligence-sharing partnership with America, Australia, Canada and New Zealand. Its spooks are still an admired espionage aristocracy. In a recent survey of spies and experts by *L'Express,* a French magazine, MI6 was judged the most capable foreign-intelligence agency in Europe, followed by the DGSE (see chart). Peers admire Britain's ability to fuse intelligence from humans (HUMINT) with signals (SIGINT) and other information from multiple agencies. The inter-agency team focused on Russia, nicknamed by some as "Russia House" (in a nod to a John le Carré novel), draws particular praise. Laggards include Austria.

Japan unlearned much of its tradecraft after the end of the second world war. Its spooks cannot operate undercover abroad and are constrained when chasing foreign spies at home. Disparate bodies share intelligence ad hoc, relying on paper copies. The body nominally in charge of them, the Cabinet Intelligence and Research Office (CIRO), has typically been entrusted to former domestic security-police officers. A Japanese writer once called it a house-cat compared with the CIA "tiger".

This summer Japan launched the National Intelligence Council, a "control tower" for its intelligence efforts, and the National Intelligence Bureau, a beefed-up version of the CIRO, to consolidate information from all sources, akin to Australia's Office of National Intelligence, which is helping with the transformation. Next, the Japanese government wants a fully fledged foreign-intelligence agency. It is also drawing up new domestic anti-espionage laws to counter the growing threat from China, Russia and North Korea. Previous efforts faced resistance owing to the legacy of Japan's imperial-era secret police.

Similarly hamstrung by memories of the Nazi-era Gestapo and Communist Stasi, Germany's BND is little more than a glorified think-tank. German spies cannot break into premises, and "targeting the communications of priests, lawyers, doctors or journalists has been off limits", says Gerhard Conrad, a former BND official.

Parliament is expected this week to debate reforms that would strengthen the BND's ability not only to watch but also to act. The agency will be able to hack opponents or even use "kinetic means" abroad (without deliberately harming people) to make foes "feel the pain", in the words of Martin Jäger, the BND chief. If the changes are adopted, Mr Conrad says, "We will go from being vegetarian to maybe flexitarian in a world of carnivores."

Like Germany, Sweden did not predict Russia's invasion. "The system captures capabilities, but doesn't capture intent," says Carl Bildt, a former Swedish prime minister. On his recommendation, Sweden is creating a new foreign-intelligence agency that will begin operating next year. It will produce national assessments from secret, commercial and public sources to "widen our aperture", explains Mr Bildt.

A parliamentary committee in Canada is studying whether it too needs a dedicated foreign-espionage agency after repeated shocks, including the murder of a Sikh activist by suspected Indian agents in 2023 and, more recently, the hostility of Mr Trump, whose officials have privately threatened to eject Canada from Five Eyes. The main Canadian intelligence service, CSIS, is primarily focused on domestic threats, with only limited authority to collect HUMINT abroad. The foreign ministry's "global security reporting programme" gathers some information, but its ambiguous status between diplomacy and espionage has caused problems.

The Netherlands, by contrast, merged domestic and foreign-intelligence functions in the AIVD in 2002. "We need to be agile and fast. That's one of our advantages as a small country," says Simone Smit, AIVD's director-general. A draft law would give spooks a yearly mandate to act against "evident opponents" without prior approval for each operation.

Reading between the lines

As with military rearmament, countries are boosting intelligence both to prove their value to America, and to protect themselves if it turns away. Juicy intelligence also allows a country to barter for prime cuts from others. In Asia, partners will "expect Japan to collect intelligence on China, especially HUMINT", says Kotani Ken of Nihon University in Tokyo. One day, some hope, Japan might become the "Sixth Eye".

Spy chiefs insist that intelligence ties with America remain strong, even as political and trade tensions intensify. Yet there are signs of trouble, from worries about the "politicisation" of intelligence to admissions that Europeans are holding back some information. An exodus of American intelligence officials has made it harder to preserve long-standing relations.

American intelligence remains vital to allies, not least in providing warnings of terrorist plots. If co-operation broke down, says David Gioe, a former American intelligence officer, "America would lose, but the Europeans would lose more."

Some want more European integration. In 2024 Sauli Niinisto, a former Finnish president, proposed "a fully fledged intelligence co-operation service" at the EU level. The Dutch government and the German defence minister have called for a European version of Five Eyes.

Spy vs spy

Top five European intelligence agencies
Aggregate score from a survey of 60 intelligence professionals*, July 2026

*Agencies evaluated on effectiveness and reliability. First place awarded five points, fifth place awarded one
Source: *L'Express*

That is easier said than done. The more widely secrets are shared, the less likely they are to remain secret. And Five Eyes, a 70-year-old alliance of countries with a common language and a history of fighting and spying together, cannot readily be replicated by others. Yet urgent need can overcome mistrust, as happened with counter-terrorism. EU intelligence cells now synthesise ever more analysis from members, though turf battles in Brussels are a headache. When it comes to raw intelligence, "Sharing at the level of NATO or the EU is almost impossible," says Arndt Freytag von Loringhoven, a former BND deputy chief.

European countries perceive the Russian threat differently, and the risk of counter-espionage constrains the sharing of sensitive intelligence. Even so, spy chiefs say "core groups" of European agencies now work jointly to penetrate hard targets such as Russia and China—sharing assessments and co-ordinating operations. "The novelty is the concept of a common mission," explains one. "We share the work according to who is the best athlete: we work one angle, you work another; and then we share the results."

Spy chiefs are ambivalent about whether all this might lead to a European Five Eyes. Mr Lerner, for one, does not rule it out in time. If it came to pass, could Britain be part of both Five Eyes with America and a putative European Eyes?

All this raises an awkward question: if America poses a threat to allies' security, should they spy on America? By convention, they are not supposed to snoop on each other. Yet in 2013 Edward Snowden, an NSA contractor who made public the American SIGINT agency's mass-surveillance programmes, revealed that America and Britain had been monitoring the telephone calls of, among others, Angela Merkel, the then German chancellor. (The Germans may also have listened in on Barack Obama.) Mr Trump once complained that Britain's GCHQ had eavesdropped on him—a claim denied by the agency.

"Other than the Five Eyes, I would assume that most countries have at least some collection efforts aimed at the United States, and that during times of turbulence that effort will increase," says a former American intelligence official, who notes such work is difficult. "It generally takes years to develop the kind of collection that gives you a reliable picture of a country's leader's plans and intentions."

Spying remains an imperfect art with a long history of missteps. Strong intelligence agencies can also get things appallingly wrong (see America's and Britain's assessments of Iraq in 2003). But facing a hostile Russia, a nuclear-armed North Korea and a rapidly arming China, the middle powers are finally building their own capacity to judge which threats are real. ■

THE TELEGRAM

Donald Trump's Greenland threats will not be forgotten

A revised defence pact is a modest improvement, but annexation threats were a costly blunder

THE ARCTIC is a safer place for America and its allies today. Due credit must go to President Donald Trump, a self-styled man of peace. He has, after all, lifted the shadow of imminent invasion from Greenland, the vast and hard-to-defend island that guards NATO's high north. In the longer term a new defence agreement announced by the Trump administration, Denmark and Greenland on September 18th marks a modest advance on previous treaties. It will make it easier for America to strengthen its military presence on the island, and to control encroachment on Greenlandic soil by China, Russia and other adversaries.

The pact is due to be signed by America, Denmark and Greenland at the United Nations General Assembly in New York. Mr Trump should not expect a Nobel peace prize for his efforts. It was, of course, he who cast the war shadows over Greenland, threatening to annex the island if he were not allowed to buy it. In these cynical times, it is a relief when war-talk turns out to be bluster, but not grounds for a medal.

By Mr Trump's own previously stated standards, the deal falls short. Time and again, including in a speech that appalled world leaders at Davos in January, he applied a property developer's logic to America's decades-old presence on Greenland. In that address to the World Economic Forum, he scorned his predecessor, Harry Truman, for handing Greenland back to Denmark at the end of the second world war, ending an American military occupation of the island designed to stop it falling into the hands of Nazi Germany. "How stupid were we to do that?" growled Mr Trump, accusing modern Denmark of ingratitude. Back then, he insisted that he needed to own Greenland outright, title deeds and all. If a war breaks out, "who the hell wants to defend a licence agreement or a lease?" the president demanded to know.

To be fair, previous presidents had similar concerns. In 1946 Truman administration officials and army chiefs thought Greenland was so strategic that they seriously considered buying it from Denmark for $100m in gold ($1.71bn in today's money), or swapping bits of it for chunks of Alaska. After Denmark balked, cold-war America settled for a treaty allowing it to maintain bases on Greenland more or less at will, as long as Denmark was consulted. Truman and his successors saw value in America shunning the colonial land-grabs of earlier great powers.

Now America has a president who talks big about taking territory, from the western hemisphere to the Middle East. Thankfully for other governments, he has been content, thus far, with fantasies showing him planting the Stars and Stripes on far-flung lands, in AI-generated images of conquest pumped out by White House social-media minions. In the actual case of Greenland, he has settled for what amount to reworded lease terms, with demands for ownership quietly dropped. Mr Trump calls the new agreement a "dream come true" for America, which he says now controls Greenland's security and "all other needs" in perpetuity. There will be no cost to America as it develops a "large military presence" in Greenland, he adds. It remains unclear what he means by that, for Denmark, a country of 6m people, is not about to foot the whole bill for America's Arctic garrison.

At least a deal was done. That stands in contrast with interminable talks over Ukraine, Iran and Gaza that Mr Trump has entrusted to his fellow property developers, Steve Witkoff and Jared Kushner. Those envoys are guided by the principle that foreign-policy disputes are, at root, wrangles about land and resources, which can be resolved by offering profitable opportunities to each side. Earlier on, some in Trump-world talked loudly about minerals and oil buried beneath Greenland's permafrost, ignoring warnings about the expense of Arctic operations. But the final deal was the result of months of discreet diplomacy, supervised on the American side by Marco Rubio, the American secretary of state and national security adviser, and by his deputy Mike Needham. Mr Trump did not offer a running commentary on the talks, and there were no boasts about billion-dollar profits to be made. As if pleading for Mr Trump to take a win for quiet professionalism and move on, Mr Rubio says that "this deal permanently and completely addresses our national security concerns in Greenland."

Mr Trump puts ties with Europe on ice

Not long ago the Danes were among the most pro-American of Europeans. Yet in a poll conducted in May, just 7% called America an ally. Their government this year signalled interest in joining other European members of NATO in accepting an offer to be protected by France's nuclear deterrent. Not long ago, Atlanticist Denmark would never have signed up to that sort of Gallic scheme. But the Greenland scare leaves European governments determined to be less dependent on a fickle America. Asked whether Mr Trump is a good salesman for European weapons, as NATO members think twice about buying American, a Nordic prime minister replies: "Absolutely."

Nor will Mr Trump's departure heal all wounds. Eagerly defending his boss, Vice-President J.D. Vance called Denmark a bad ally, appalling Danes who remember the heavy losses their troops suffered, fighting alongside America in Afghanistan and Iraq. Denmark learned a painful lesson: the next generation of American leaders includes many veterans like Mr Vance, who think the war on terror was a catastrophe and feel no nostalgia for its shared struggles. America's desire for Arctic bases (and Europe's need for American help to deter Russia) resolved this particular presidential tantrum. But gibes asking why America should defend foreign soil cannot be unsaid. The transatlantic bond is growing colder and far more transactional. Mr Trump wanted Greenland to be part of his legacy and so it will be. Just not as he imagined. ■

Business

American business in China

Still thwarted

SHANGHAI

Donald Trump says China is opening up. American bosses disagree

American companies should be celebrating. China is on the verge of a grand opening of its markets to them, claims Donald Trump. The president's meetings in Beijing in May with China's ruler, Xi Jinping, yielded such a promise: it is just waiting to be "papered". Mr Trump surely hoped for that when meeting Mr Xi again in Washington on September 24th, after *The Economist* went to press.

Maybe more. At pre-summit talks officials formalised a "board of trade", proposed by the leaders in May, to identify possible tariff cuts. Soon after Mr Xi landed, America's treasury secretary, Scott Bessent, said the two countries would extend their "trade truce", due to expire in November, until January.

It is not all rhetoric. Citigroup, one of America's biggest banks, may soon open a fully owned brokerage in China (it helped that Dame Jane Fraser, Citi's chief executive, was among the bosses accompanying Mr Trump to Beijing). A survey published on September 10th by the American Chamber of Commerce in Shanghai finds American firms at their most optimistic about their prospects in China since 2021; profitability is also edging up. A handful of big chipmakers, including Nvidia and Qualcomm, pushed American companies' revenues in China to a record high last year.

This year Ralph Lauren, an upmarket fashion brand, and Sam's Club, a members-only retailer owned by Walmart, have been among those making a fortune.

For American bosses, the pleasantries between Messrs Trump and Xi have eased fears of another all-out trade war. Since May, China has pressed ahead with its promised purchases of soyabeans from America. And higher revenues are great if you can get them. Yet most executives at American firms in Beijing and Shanghai are hardly upbeat. The improved confidence reported by the Shanghai chamber followed four years of record lows.

One reason for the foul business sentiment is that, for all the leaders' smiles, the political mood remains dark. Both sides have continued to issue threats. Mr Trump recently proposed a 7.5% tariff on Chinese goods, on top of the 20%-plus they already bear. (Chinese exports worldwide surged by 25% year on year in August.) American officials are said to be devising new restrictions on purchases of Chinese tech gear.

Meanwhile, some Chinese suppliers of rare earths have mysteriously stopped supplying American customers, despite having official permission to do so. Chinese officials have also rebuffed American efforts to isolate Iran during the Gulf war. When it comes to solving these problems, "negativity prevails," says an American corporate insider in Beijing. "But maybe that's what 'constructive strategic stability' looks and feels like." Officials from both countries have used the phrase to describe the relationship since May's meeting.

A second problem is that access to Chinese markets, even if it comes, might not amount to much. Google, Meta, Netflix and others have spent years trying to crack China's internet economy. In Chinese eyes, industries such as online search, social media and video streaming are already open to those willing to abide by Chinese laws—which entail employing censors and deleting or freezing accounts without explanation. With China tightening its controls on free expression, there seems to be little hope of much change.

In other potential markets Americans are late to the game. Before China joined the World Trade Organisation (WTO) in 2001 the central government could have removed huge obstacles for American businesses, says Randall Schriver, chairman of the US-China Economic and Security Review Commission, a bipartisan body set up by Congress. Since then American leverage has diminished. In financial services, for example, China was supposed to allow foreign firms to expand as part of its WTO obligations. But local authorities stalled on granting licences to firms such as Visa and MasterCard, the West's leading payment processors. Instead Chinese payments are dominated by domestic tech champions like Ant Group and Tencent. Today, says Mr Schriver, no American president can do much about such local competition.

Another problem Mr Trump can do little about is persistently thin returns on new investments. A few companies' record revenues do not tell the full story: most American firms' sales in China have stagnated since 2023 (see chart). For some, the slide began sooner. Apple's sales in China last year were the biggest of any American company, but were roughly $10bn smaller than in 2022. In the past four years PepsiCo, a maker of drinks and snacks, has watched its sales level off and then fall.

Some firms are pulling back. Because returns are low, they have decided to stop investing in China and are shrinking their operations. That reflects not just fierce local competition but also the sluggishness of the economy. With money tighter, consumers are increasingly stingy. Markets once thought to be the future of China's consumer economy, like high-end medical services, now look much less promising, even as they open to foreign companies. American health-care groups now question why they would deploy scarce resources such as doctors in China when returns are higher elsewhere, says Joe Ngai, the local head of McKinsey, a consulting firm.

The semiconductor industry is the brightest spot. Among American firms that report full-year sales in China, chipmakers contributed more than a third of last year's total. Their revenue grew by 9% in 2025, making them the bedrock of American business in China.

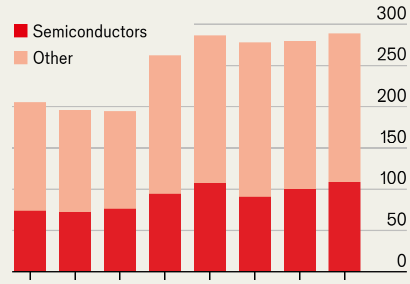
But this is also the market most at risk. The rapid rise of advanced hardware sales reflects the emergence of China's artificial-intelligence industry—and Chinese firms' well-founded fears that supplies will be cut off: both Mr Trump and Joe Biden banned sales of high-performance chips and other gear. Allowing access to such chips looks hard to square with Mr Trump's insistence on winning the AI race with China.

If American resistance to selling the tech were the only obstacle, it might be overcome in discussions between Mr Xi and Mr Trump, who is eager to announce big deals intended to lower his country's trade deficit with China. But given Mr Xi's desire to keep the most advanced American parts out of China's AI systems, his industrial policy now revolves around the concept of self-sufficiency in chips. That goal remains far away, but one route to it has been to block Chinese companies from buying Nvidia's chips and other American components, while pushing spending on home-made ones. This project is moving quickly. In 2020 just 6% of the equipment used in wafer fabrication was domestically suppliable; by the end of this year that share may be close to 30%. The talks in Washington may buy American companies some time, but for Mr Xi self-sufficiency is, in the end, not negotiable.

It is possible that Mr Trump's version of an open China is simply one that buys more corn and soyabeans from America, notes Ker Gibbs of the University of San Francisco, a former executive in China. The president may be happy to announce more headline deals on big-ticket items, such as Boeing jets—anything to help him claim he has pushed down the bilateral deficit. If that also eases tariffs and sanctions, America's bosses will take any relief they can get. But expectations for better days and bigger sales remain low. ■

Chipping away

US companies*, revenues from China, $bn



*Listed companies reporting sales in China each year
Source: Bloomberg

Business in the Gulf

A new normality

DUBAI

How a bellwether of Dubai's economy is responding to the war

As the builder of the world's tallest skyscraper and one of its biggest shopping malls, Emaar Properties embodies Dubai's ambitions—and its resilience. Almost 20 years ago the global financial crisis struck just as the 828-metre Burj Khalifa was about to open its doors. Emaar's American unit filed for bankruptcy, the group's profits sank and debt ballooned. Five years ago, amid the covid-19 pandemic, Emaar came to the aid of its mall unit, buying out minority shareholders.

This February the Gulf war broke out, just as Emaar was enjoying record profits. The firm—regarded as a bet not only on Dubai's property market but on its whole economy—was the biggest loser on the local stock market. Its share price dropped by about a quarter in the month after hostilities began, while the market index fell by a sixth. In a show of confidence the president of the United Arab Emirates (UAE), Muhammad bin Zayed al-Nahyan, walked through the giant Dubai Mall on March 2nd.

More than six months on, Mohamed Alabbar, Emaar's founder, is similarly unfazed. "History shows us that every two and a half years there's a shake-up," he says. To prove it can handle the latest, on September 16th the company announced a special dividend of 4.4bn dirhams ($1.2bn), equal to half of last year's regular payout. But "we can't change the map," Mr Alabbar says. Emaar and other local firms are having to adjust to newly uncertain circumstances. For those who can, that means seeking opportunities outside the Gulf.

Although daily life in Dubai is largely back to normal, signs of a peace deal—and of a fully fledged business recovery—are scarce. In August non-oil private businesses in the whole UAE reported stronger exports than in July. There were fewer disruptions to supplies to shops and other business. But employment fell. Sales at Spinneys, a supermarket that caters to wealthy expatriates, edged lower in the three months to June. At Talabat, a popular food-delivery service, pre-tax profits across the Gulf fell by about 30%, year on year, in the first six months of 2026.

Anecdotally, hospitality workers remain furloughed or on reduced pay. Several hotels and restaurants have closed, fully or partly, for renovations, disguising the true drop in occupancy rates. Some property developers, including Majid Al Futtaim, an Emirati conglomerate, have delayed the completion of units owing to rising materials costs. Other Gulf economies are faring worse. Qatar's exports of liquefied natural gas in August were a tenth of pre-war levels. In Bahrain and Kuwait a strong recovery is distant.

No wonder Mr Alabbar is looking abroad. Before the war he had already invested in projects in Italy, eastern Europe and India. (Through Eagle Hills, a privately held firm, he had also agreed to join Jared Kushner, Donald Trump's son-in-law, in building a Trump Tower in Belgrade, but Mr Kushner cancelled the project last year after protests and the indictment on corruption charges of a Serbian minister.) But Emaar's international developments account for only 5% of revenue so far.

Heading abroad does not mean avoiding risk: in May Emaar doubled down on Syria, exiting a long-standing joint venture in order to go it alone. It intends to invest as much as $19bn in the still volatile country. Eagle Hills is planning a $12bn project in the Maldives. Mr Alabbar's schemes for both countries will probably include social housing, of which there is a persistent shortage. In India he is looking at areas such as Navi Mumbai, a satellite city near Mumbai. He is also developing homes, retail and entertainment in Egypt.

Other Emirati firms have similar ideas. Agthia Group, a food and beverage company, has set its sights on expansion in Egypt and Saudi Arabia. FAB, the UAE's largest lender, plans to bulk up in Hong Kong in the hope of doing more business in China. Regional firms that already have foreign operations have found that the hedge has played out well. Talabat's sales in Egypt, where it has been expanding, have grown sharply. But not every business has that option. Smaller firms in particular lack the means to make large outlays abroad, especially in uncertain times.

Dubai may have been due a property slowdown even without the war. Before it, Mr Alabbar says, he was "keeping an eye on supply" in the property market. Analysts had predicted a deluge of new homes. But he thinks that in the long term there is little reason to believe that people, mainly from emerging economies, will stop coming—and occupying the homes he builds. In the first half of the year Dubai issued more than 1m residence permits and renewed over 900,000. It also granted another 66,000 long-term visas: a healthy number, if below the record pace of 2023.

Still, it is hard to see billionaires rushing back soon to buy opulent villas, or tourists filling hotels and emptying wallets as they did before the war. Many businesses have little choice but to look abroad or sit tight. Lots of them have thick cash cushions, having learnt from past crises. Waiting and seeing may be Dubai's new normality. ■

Transporting oil

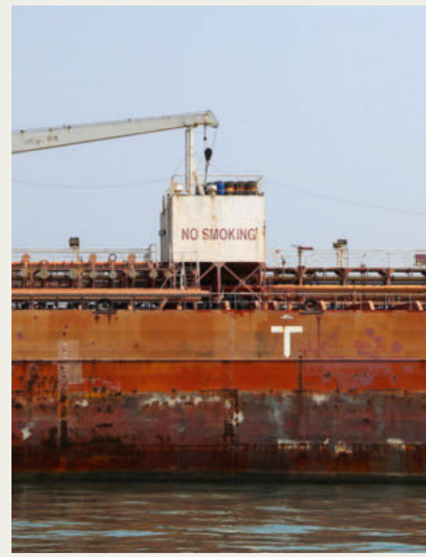
Hormuz the tanker engine

The squeeze in the strait has has sent the cost of moving crude soaring

THE PURPOSE of very large crude carriers (VLCCs), which hold 2m barrels of oil, requires little explanation. The very large cost of chartering one at the moment requires more. The Gulf war has hit oil production, yet rates are "far beyond anything in the history of tankers", says Greg Miller of *Lloyd's List Intelligence*, a trade publication. At around $650,000, the average daily spot rate is over six times more than in January and nearly three times more than at the start of September. A handful of vessels traversing the treacherous Strait of Hormuz are fetching over $1m a day.

The reason is that although more oil is coming out of the Gulf on ships and through pipes than a few weeks ago, its way to market is riven with inefficiencies. "Hormuz is the rate driver," says Mr Miller. A shuttle service of Gulf-owned VLCCs, protected by the US Navy, is bringing oil through the strait for transfer to VLCCs anchored off Oman owned by firms not prepared to risk that journey. Around 15% of the global VLCC fleet is at Oman, much of it awaiting cargoes that take two to three days to swap over.

To the west, the threat to shipping from Yemen's Houthis at the mouth of the Red Sea means that VLCCs taking oil from the Saudi port of Yanbu farther up the coast are heading in the opposite direction, towards the Suez Canal. Because they are too big to go through the canal fully laden, the oil is offloaded, piped across Egypt and reloaded onto VLCCs in the Mediterranean for the long voyage to Asia round the Cape of Good Hope. The recent closure of the East-West pipeline to Yanbu after a drone attack is likely to mean shuttling more oil via Hormuz, keeping capacity tight.



The price is, though

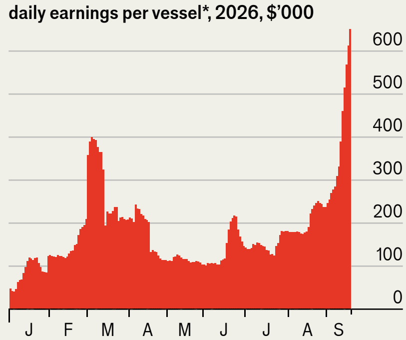
The added time and distance VLCCs are travelling have compensated massively for the reduced volumes of crude, says Stephen Gordon of Clarksons, a shipbroker. They have also sent ripples across the industry. If a VLCC is unavailable for, say, a trip between Brazil and China, two Suezmax tankers, which each carry around 1m barrels, are needed. Rates for these ships are also surging; so, in turn, are those for smaller tankers.

For tanker-owners, this means a bonanza. Trafigura, a giant privately held commodity-trading house, said on September 21st that it would float its tanker arm to raise cash to buy new ships to take advantage. A buying spree by national oil companies desperate to secure capacity has sent prices of ten-year-old VLCCs above the cost of new ones that could take over two years to deliver.

Past rate spikes have quickly eased. Oil refineries, which customarily endure thin margins, simply stopped buying crude delivered at inflated prices. This time the oil-supply squeeze has pushed margins to record levels, offsetting extra transport costs that might exceed $25 a barrel. Great times for tanker-owners; bad times for almost everyone else.

The accrual sea

Very large crude carriers, daily earnings per vessel*, 2026, $'000



Source: Clarksons Research *Global average

Indian business

Wayward Sons

MUMBAI

Tata goes to war with itself

WHO RUNS Tata? The Indian conglomerate's board meeting on September 17th offers no easy answer. One claimant is Noel Tata, who chairs Tata Trusts, a group of charities that is Tata's largest shareholder. The other is Natarajan Chandrasekaran, chair of Tata Sons, the holding company that runs the businesses. The board split four to one, with Mr Tata the only dissenter, to give Mr Chandrasekaran a third five-year term, though he had said a month earlier that he would not seek one. The board also voted to stop fighting a demand from the Reserve Bank of India (RBI), the central bank, for Tata Sons to list. That too was against Mr Tata's objections.

The meeting matters beyond Bombay House, the group's headquarters in south Mumbai. The steel-to-software giant is one of a handful of national champions central to the industrial ambitions of Narendra Modi's government. Indian-made chips should roll off a Tata Electronics fab line early next year. Tata produces 46% of Apple's Indian-made iPhones. It is responsible for turning around Air India, the privatised struggling flag-carrier, which commands about a quarter of domestic routes.

Most of those champions are identified with a powerful owner-manager, or promoter, such as Gautam Adani of Adani Group or Mukesh Ambani of Reliance Industries. At Tata that figure was once Ratan Tata, Noel's half-brother and for many years the chair of both the Trusts and the holding company. Ratan twice passed over Noel to run Tata Sons. He first chose Cyrus Mistry, whom he ousted in 2016 (and who died in 2022). He then picked Mr Chandrasekaran, who climbed the ranks of Tata Consultancy Services, an IT outsourcer. Almost as soon as Noel became chair of Tata Trusts after Ratan's death in 2024, he clashed with Mr Chandrasekaran.

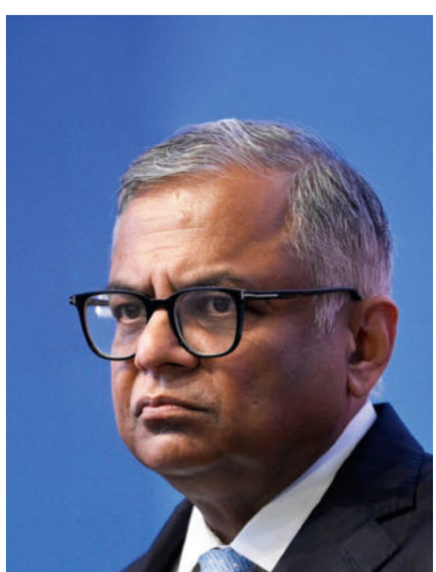
The fight is heading to court. Both Tata Trusts and Tata Sons have recruited lawyers who are veterans of the battles that followed Mistry's ousting. Noel Tata has declared the boardroom vote a "legal nullity". Tata's articles of association say that an agreement needs a majority of directors nominated by Tata Trusts: there are two, including Mr Tata. "Majority amongst two is two and not one," the Trusts said. Tata Sons argues that a majority of the board, including the Trusts' other representative and the vote of the director chairing the meeting, was sufficient.

Others want a say. One is Shapoor Mistry, brother of the late Cyrus and brother-in-law of Mr Tata. Mr Mistry is the promoter at SP Group, an infrastructure firm, and Tata Sons' largest minority shareholder, owning 18%. He is keen to sell his stake, in order to repay SP's considerable debts. The Mistrys and the Tatas, both from the Parsi religious minority, have nearly a century of business entanglement.

But perhaps the most powerful voice is the RBI's. In 2021 the central bank required India's biggest non-banking financial corporations to go public, after the collapse of an infrastructure lending company. Tata Sons has resisted, paying down all its debt and listing Tata Capital, its investment arm. On September 11th the RBI rejected Tata Sons' latest attempt to fight the classification, leaving the firm with little choice.

The RBI has since tightened the net further. On September 22nd *Business Standard*, a newspaper, reported that the RBI was considering insisting on an accelerated listing to "remove any ambiguity" about its latest ruling. A listing would weaken Mr Tata's power over the company, possibly removing the Trusts' veto. He should not worry unduly: Messrs Adani and Ambani retain great power over their listed companies. But unlike Mr Tata, they have not alienated everyone else on their boards.

A listing might not secure Mr Chandrasekaran's third term, though. The court case will proceed under today's articles of association: judges will decide what makes a majority. Some believe the government would be sad to see him go. Some believe it should be. "I think the world of Chandra," said Jamie Dimon, the boss of JPMorgan Chase, America's biggest bank, in Mumbai recently. "If I were the government, I would be concerned that this kind of conflict could deter foreign investment." ■



Chandrasekaran, the winner for now

German industrial relations

A red-hot autumn

BERLIN

Unions will fight for the 35-hour week

THE MOOD at Gate One of the Mercedes-Benz factory at Marienfelde, on the southern edge of Berlin, was combative. Several hundred people—workers in black factory uniforms and trade unionists in red T-shirts—blew whistles and waved placards demanding "Ola out!" (Ola Källenius is chief executive of Mercedes) and "The 35-hour workweek must stay". Yasmin Fahimi, who chairs Germany's trade-union confederation, told them 35 hours was "a red line". Constantin Borchelt, head of the Berlin branch of IG Metall, the metalworkers' union, produced a red vest, emblazoned with the number 35 and a smiling sun, worn by workers during the bitter but successful seven-week strike in 1984 that cut the week from 40 hours to 35.

IG Metall, the world's biggest industrial trade union, with 2.2m members, had called for a "day of action" on September 21st for car-industry workers. Some 175,000 gathered at 280 events, at places including Wolfsburg (home to Volkswagen), Stuttgart (Mercedes and Porsche) and Ingolstadt (Audi). As well as aiming to defend the 35-hour week, the union wants a 5% pay rise and commitments that jobs and factories will be safe. Südwestmetall, an influential regional employers' association, declared itself "aghast" at these demands. Talks about wages are due to begin on October 7th. Strikes could start as soon as November 1st. "This autumn will be uncomfortable," predicts Marcus Berret of Roland Berger, a consulting firm.

On the employers' side, Mercedes is taking the lead on dismantling the 35-hour week, which is subject to separate talks. "If one carmaker nixes the 35 hours, the others will follow," says Ferdinand Dudenhöffer, director of the Centre for Automotive Research, a think-tank. Mercedes is threatening to close two German factories unless workers agree to painful measures. It wants to extend the week to 40 hours without extra pay and to reconsider perks such as bonus pay for Christmas and holidays, in a "productivity offensive".

"It simply does not make business sense to produce cars in Germany any more," says Oliver Fenzl, a company spokesman. Labour costs have long been higher in Germany than elsewhere in Europe (let alone China), but in the past they were offset by cheap energy, freer trade and China's voracious demand for German cars, especially premium models ▸▸

with fat margins. But today energy prices are sky-high, trade is less open and the Chinese are making their own cars (including premium ones) in abundance. Mercedes's sales in China have dropped by 27% and profits by 50% in the past three years; domestic carmakers' market share has doubled to 70% in the past five. Failure to match Chinese competition largely explains why earlier this month Volkswagen said it would cut 50,000 jobs and close four factories in Germany in the next few years.

Meanwhile the wage gap with the rest of Europe has widened. Hourly pay at Mercedes's factory in Kecskemet in Hungary is around €15.60 ($17.80); Germans are on €49.50. This year the firm doubled Kecskemet's capacity to 400,000 cars a year. It is now bigger than any of its German plants.

Union leaders call management's cost-cutting proposals a "horror catalogue". Far from accepting a 35-hour week, they suggest cutting it to 30, which they say could preserve jobs and capacity (if at a lower weekly wage). The two sides will probably muddle through for now—compromise is the norm—but they are unlikely to stop the shrinkage of what was once the crown jewel of German industry. In 2018 carmakers employed around 830,000, says Mr Dudenhöffer. Now the figure is 700,000 and he forecasts it will be 500,000 by around 2030. A few years ago this would have been dismissed as a horror scenario. Now a selection from the horror catalogue may be the best option. ■

BARTLEBY

The greatest advance in consulting since the quadrant

An exclusive extract from a new book

"I REMEMBER IT as though it were yesterday." Wendy Clanger smiles as she recalls the events of April 1st 2017. Clanger, whose petite frame hides an iron will, had been a consultant for decades, and thought she had seen everything. "Radar charts, quadrant matrices, waterfalls: I'd used them all. I thought the geometry of consulting was complete. But I hadn't banked on Harbour."

Harbour Brandish was 23, bespectacled, just out of college. When he was assigned to Clanger's team, she assumed he was just another bright trainee, one of hundreds she had seen come and go. His first engagement was for a fast-moving consumer-goods firm called MidPoint, and he was in the room when Clanger presented some competitor analysis.

Vic von Ursen, a bear of a man whose gruff manner disguises a heart of gold, takes up the story. "We all knew that the client lagged Flummox, its main rival. But when Wendy laid it out, the gap was so much bigger than we had realised." In slide after slide, Clanger used a classic quadrant to map the performance of MidPoint and its peers in different product categories. "It was standard stuff," says von Ursen, who had spent 20 years in the industry by then. "You want to be in the top right-hand box. You always want to be in the top right-hand box."

But something bothered him. Flummox was doing so much better than anyone else that it was always in the very top corner of the quadrant. Even then, "we were having to break the scale on some axes to fit it into the chart. It was as if the quadrant wasn't able to cope."

Von Ursen said as much to the team. Everyone agreed but the quadrant was all they knew. They had been trained on it since the start of their careers. None of them could think outside the four boxes.

No one except Harbour Brandish. "It just seemed obvious to me. I couldn't work out why no one else was saying it." So he stuck up his hand.

"I saw Harbour wanted to speak," says Clanger. "I didn't know that the next three words would change the industry."

"Add another box."

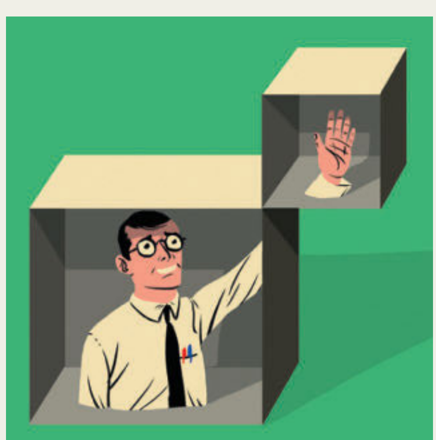
"I thought I must have misheard him," says Clanger. "So I asked him to repeat it."

"Add another box."

The room went quiet and then people started to laugh. Vic von Ursen was among them. "It was the stupidest thing I had ever heard. I regret that laugh more than anything I have ever done."

Clanger didn't laugh. A sixth sense told her that Brandish was onto something. So she asked him what he meant.

Brandish didn't answer her directly. Instead he got up and went to the whiteboard at the front of the room. "I remember getting to the board and hearing people saying to each other things like 'Yeah, right: add another box!' 'Who does this kid think he is?' 'What kind of a name is Harbour?' The mood was pretty ugly."



Brandish picked up a marker pen, and drew a normal quadrant. As he sketched, the room behind him quietened. "I looked at Wendy, and she nodded at me. That gave me the courage to carry on."

He moved the pen to the top-right corner of the quadrant, and drew a line up, in effect extending the y-axis. Then he drew a line rightward, lengthening the x-axis. Behind him there was silence. What the hell was happening?

Brandish swiftly added two more lines, drawing first down and then leftwards, until the pen was again resting at the top right of the original quadrant.

Behind him, there was pandemonium. Everyone began talking at once. "I remember shouting: 'He's added another box,'" says von Ursen. "I hugged the woman next to me. She's now my wife."

Brandish wasn't done yet. He approached the board again, and put a red dot into the new box. "That's where Flummox belongs," he said.

"That moment was pure innovation," recalls Clanger. "It was like being with Fleming when he looked at the moulds, or the Wright brothers at Kitty Hawk. It was just so obvious in retrospect. Don't break the scales. Add another box."

Clanger walked to where Brandish was standing. "I remember she looked a bit tearful," he recalls. "She saluted, which struck me as a bit odd, and I saluted back, which was even odder. Then we shook hands, and she asked me what I called this new shape. I just said the first thing that came into my head. 'I call it the quindrant.'"

From "The Shape of Things to Come: How A Small-Town College Graduate Changed The Visual Language of Consulting and Reset the Bar for Every Business Leader in America", by Tad Beltway.

AI devices

Spec savers

LOS ANGELES

How tech firms hope to beat the backlash against "pervert glasses"

A YEAR AGO your correspondent lost the charging case for his Ray-Ban Meta smart glasses and, with some relief, had to stop using their camera, audio and artificial-intelligence features. He still wore them as shades. But this summer, during an open-air performance of "A Midsummer Night's Dream", a parent of a member of the young cast accused him of covertly filming the event. Since then, he has felt creepy using them even in dumb mode.

He is not alone. In recent months, after videos emerged of men using the glasses to secretly record and harass women, some have referred to Ray-Ban Metas, sold by Mark Zuckerberg's social-media giant in conjunction with EssilorLuxottica, a Franco-Italian eyewear-maker, as "pervert glasses". Luca Solca of Bernstein, an investment firm, said that it reminded him of the "Glasshole" epithet tabloids slapped on users of Google's short-lived smart glasses in 2014.

In response, developers have produced free apps such as Nearby Glasses and ZuckOff that use Bluetooth signals to help people detect the devices, even though only a few are known to misuse them. Those relishing the backlash may include investors, in both Meta and EssilorLuxottica, who hope it will derail what some see as a margin-shredding vanity project.

That is unlikely. In fact, while taking steps to repair the public-relations damage, Meta is doubling down on its eyewear. So is Snap, owner of Snapchat, a video and messaging app, which this month launched a swanky augmented-reality (AR) pair called SPECS. In the autumn Google and Samsung will unveil intelligent glasses powered by Google's Android operating system. Omdia, a data gatherer, said global shipments of AI glasses more than doubled year on year in the six months to June to 4.2m units. Meta and a wave of new Chinese entrants led the way.

It is too soon to know how much the "pervert glasses" furore, which flared up after June, will dent sales. Meta belatedly took steps to halt covert abuse, such as disabling the camera when a wearer tries to tamper with the LED light that shines while filming. The firm said it had also removed content made by miscreants and suspended some of their social-media accounts. Insiders say shipments of its glasses doubled this summer from the previous summer, suggesting uptake is still strong.

Not a good look

But the incidents have had an impact. At its annual developers' event, Meta Connect, on September 23rd, the company introduced Ray-Ban Meta Audio, its first camera-less smart glasses, which insiders hope will take some of the sting out of privacy concerns. It is also counting on the bad optics being overshadowed by the incorporation of Muse, its personal AI agent, into the glasses; Muse has been such a hit since it was launched this month that it has sparked a rally in Meta's share price (see Schumpeter). The firm appears to have no plans to backpedal on cameras; it says that by the end of the year it will have a line-up of 100 smart-glasses models. Still, the brouhaha emphasises how little can be taken for granted as companies strive to create devices that define the AI age as the smartphone did the mobile era.

For now, what stands out is the plethora of alternatives. Functionally, Snap's SPECS (pictured) are more like a wearable PC than a pair of glasses. As well as see-through lenses, cameras and earbuds, they have AR features that enable wearers to read maps, play dominoes and (with a keyboard) work on Google Docs. In an interview with *The Economist* Evan Spiegel, Snap's boss, criticised Meta for "trying to create spy glasses". No one would mistake SPECS, with their iridescent lenses, for covert surveillance devices, he said. Whether consumers will fork out for them is another matter. Their starting price of just below $2,200 is more than seven times that of Meta's cheapest pair. At first, they are likelier to attract business users, from influencers to engineers doing fieldwork, than high-street shoppers, predicts Jitesh Ubrani of IDC, a market-research firm.

Meanwhile, Chinese upstarts are entering the field in force. According to Omdia, this year unit sales of smart glasses within China have grown much faster than in the rest of the world, if from a much lower base. Competition is also fiercer. Whereas Meta has an 81% global market share, in China Alibaba, Xiaomi and INMO, the three biggest producers, account for less than half of shipments. Firms are trying out numerous hardware configurations, Omdia notes.

A white-label market for smart glasses is also taking off. Qualcomm, designer of Snapdragon chips that power AI devices in America, China and elsewhere, produces miniature modules (including software) that fit into the rims of many types of eyewear. The firm hopes unbranded smart glasses will find their way into fashion, health care, education and industry, says Ziad Asghar, a Qualcomm executive.

He sees several ways in which smart glasses will connect with the outside world. For now, the default is to pair them with smartphones. They may become linked to smaller computational "pucks" worn by the user, or, once battery-life issues are resolved, have built-in cellular connectivity. But the AI-device market will not end with glasses, he believes. It is also likely to include pens, pendants, bags, rings and more. Unlike the smartphone, "the answer is not just one device," he says.

Creepy or not, cameras are sure to stay integral to many AI devices because agents like Muse need eyes on the world to be effective. This is still the age of surveillance capitalism—just through a new lens. ■

SCHUMPETER
Man and Muse

The relationship between people and their AI agents needs examination

So THE LAST shall be first and the first shall be last. The race to build artificial intelligence is so frenetic that declaring any firm the winner is a sure sign it is about to be overtaken—and vice versa. Meta's AI investments had been written off by many as wasteful vanity. Yet the same investors now say Muse, the firm's new personal agent, will soon upend commerce and the world. Muse is at the top of the charts on Apple's App Store. Meta's share price has risen by around a third in the past month.

Chatbots are often compared to interns. Muse is more like an indentured secretary. Users will find the difference total: between being read a train timetable and having tickets booked; mulling one's rights and filing a claim; comparing phone tariffs and overcoming the obstacles companies erect to prevent customers switching. Markets for goods and services can be surveyed totally and ceaselessly. No form is too long; no claim too small.

Which of the Millennium mathematics problems can Muse solve? That is unclear. But prod Muse in the right way and you could wake up with a cheaper car-insurance policy. Might Muse agents end the world? Mark Zuckerberg, Meta's boss, has dismissed worries about AI safety, much as the White House has. Though not yet the most popular AI product, Muse is surely the first populist one, designed for the everyman of Facebook Marketplace for whom privacy does not matter, existential risks are bunk and everything in the economy is either a bargain or a scam.

The mood in markets is similar to what it was in February. Back then, as it became clear that models could write code better than humans, the question was: what happens when everyone has the coding ability of a Silicon Valley engineer? Shares in software companies were sold indiscriminately (many have since recovered). Now the question *du jour* is something like: what happens when everyone has the patience of a monk?

The state will struggle with its newly agentic citizenry. When the cost of identifying and claiming all the rights and benefits rich countries offer their people falls, governments will end up spending more. That is an acute problem for courts, which are already flooded by AI-written filings. The rule of law demands that citizens can enforce their rights, but also that courts remain open, and judges human. Troublingly, most solutions to this trilemma involve more money or fewer rights.

Companies will suffer in proportion to the profits they receive from ignorance and inertia. Economists have long speculated about why money sits in bank accounts when it could earn far more interest in a money-market fund. Or why insurance customers allow their loyalty to be punished with higher rates, and don't simply switch. It is often said that the West suffers from a compensation culture, but plenty of compensation goes unclaimed. In Europe only around half of potential compensation for delayed and cancelled flights is actually paid out—often with the help of firms that take their own cut from afflicted customers.

When consumers let agents loose on their behalf, firms that rely on subscriptions are less secure; it costs little to test Muse by attempting to cancel an unwanted gym membership or newsletter subscription. So are businesses that depend on being able to distinguish humans from computers. A qualification earned online must now be worth less. Most would find the idea of flirting with a robot intolerable. Once agents get chatting on dating apps, those apps will be reduced to elaborate matching systems between singletons' online personas.

States and firms could attempt to reimpose frictions with their own technology. Imagine agents keeping other agents on hold, ignoring and chasing each other in increasingly aggressive email correspondence. (Ironically, such defences will make the internet even more unbearable for humans.) Shopify, an online-commerce platform, has welcomed Muse agents. Amazon has banned them. If the AI bulls are to be believed, that will soon be costly, since agents will be responsible for a meaningful share of commerce, and because they will be harder to identify: "tick the box to prove your humanity" becomes "click the yellow bikes" becomes "upload a photo with today's newspaper".

Unburdened of administrative work, consumers might ask a more fundamental question of their new agents: what is the relationship between Man and Muse? Opinions about the homo-agentic bond will differ. The user of an agent is likely to consider her new assistant an ordinary tech product, for which she does not bear total responsibility. To the world, of course, the agent and its manager will be quite indistinguishable. Model-makers surely think much of the responsibility lies with the user.

Free agents and free will

Consider three scenarios. John instructs his agent to write funny posts online, and it proceeds to libel someone; Susan tells her agent to negotiate the sale of some goods but, being prone to exaggeration, it misrepresents them; chatting with his agent, Paul orders a kite for his young son, who then receives, and cuts himself with, a knife. Careless people operating careless models, you say. But the concepts normally used to apportion blame are stretched by the nature of AI. What does it mean to say that harms caused by something as general and mystical as AI are foreseeable? If the model-maker is blamed, does it matter that its code was written by agents, plausibly designed by another lab?

The tension between autonomy and responsibility is among the most fundamental questions in AI. Mostly this has been discussed in the abstract, in terms of the existential risks and AI consciousness. Now a million agentic citizens let loose on the economy will find out for themselves. If they don't like the result, they know how to appeal. ■

Finance & economics

The housing market

Shaky foundations

House prices survived the last rise in interest rates in 2022-23. Will they this time?

RISING BOND yields imperil government finances. They will also change the housing market. The interest rate on most American mortgages, after all, closely tracks the ten-year yield on Treasuries, now around 5% and the highest in two decades; German mortgage lenders price off long-term bunds; and so on in other rich economies. If interest rates remain high, let alone rise further, a confluence of factors could spell a long period of weakness for house prices.

After the last jump in borrowing costs, in 2022-23, the global housing market emerged remarkably unscathed (see chart on next page, left panel). Even adjusting for the inflation of recent years, rich-world house prices are only 4% off their all-time high. True, a few markets have wobbled. In New Zealand, where the housing market entirely detached from economic fundamentals during the covid-19 pandemic, real home values have fallen by 25% from their peak. Germany's housing market, usually boringly stable, has also slumped.

But many other places are seeing a housing boom of sorts. Australia's real house prices are slightly above their pandemic peak. In the fanciest parts of San Francisco, the neighbourhoods where Sam (Altman), Jensen (Huang) and other AI moguls known mainly by their first name have homes, house prices are up by 20% over the past year. Some markets are even healthier (for owners) or more unaffordable (for buyers). Someone who had the foresight to buy a house in Portugal during the dark days of the euro-zone debt crisis in 2013 would now be sitting on an asset worth nearly 200% more in real terms.

No one knows the future path of interest rates. Yet investors worry about housing. In America housing-related shares (such as those of construction firms) have underperformed the wider market by 16 percentage points since June. UBS, a bank, reckons that next year British housebuilders' profitability will fall to its lowest rate since the aftermath of the global financial crisis of 2007-09. Even in Australia, where seemingly nothing can topple the housing market, homebuilders' share prices are 10% off their recent highs. Three factors suggest that the rich world's housing market is vulnerable to higher rates: mortgages, household finances and supply.

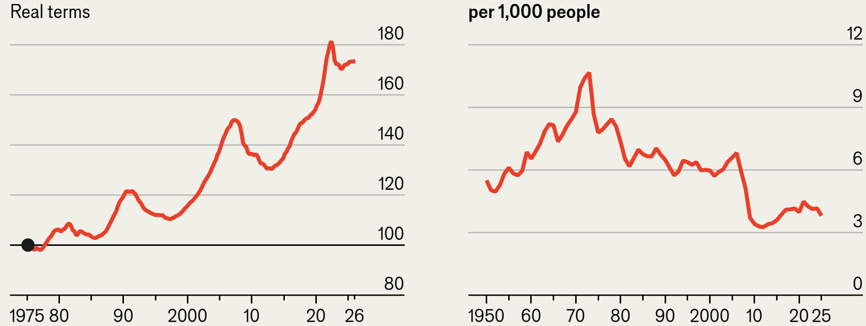
Take mortgages first. Households entered the last shock unusually well insulated. During the pandemic many Americans refinanced into loans fixed at 3% for 30 years. Australians rushed to take out fixed-rate mortgages, which the central bank had in effect subsidised over variable-rate ones (thanks to a "term funding facility" which lent to commercial banks at rock-bottom rates for fixed terms). In Britain, by 2022 a small chunk of mortgage lending ▸▸

→ ALSO IN THIS SECTION

This house is no longer on fire

Rich world, house prices, Q1 1975=100
Real terms

Advanced economies*, housing units built per 1,000 people



Sources: National statistics; *The Economist*

*11 countries

had fixed rates for more than ten years—something once thought to be about as likely as getting a high-definition photo of the Loch Ness monster. Those "fixes" offered protection as interest rates rose.

Mortgage holders have less of it today. In most countries for which *The Economist* could find reliable data, households have taken out variable-rate products, in the hope that rates decline. In Australia the share of the stock of mortgages on fixed rates has fallen from nearly 40% in 2022 to around 5%. In Canada the share on variable rates has doubled from its level in 2020. Even in America, the land of the eternal mortgage fix, adjustable rates are commoner than in 2021. Households that continue to fix their mortgages often do so for less time. Our estimate suggests that the average Briton who fixes their mortgage now does so for 2.4 years, down from a recent peak of 2.7 years. The decline in Canada's effective fix looks much steeper.

The second crutch in 2022-23 was cash. Generous covid-era handouts had left rich-world households with "excess" savings of $5trn (or one-tenth of GDP back then). People complained about a "cost-of-living crisis" as prices and interest rates rose, but many of them could draw on this stash to make ends meet. Today the excess savings have been drawn down. According to research published by the San Francisco Federal Reserve, Americans burned through their $2trn pile by mid-2024. In the EU households' deposits are worth 67% of GDP, down from a recent high of 77%.

The third and final support for prices relates to housing supply. The interest-rate rises of 2022-23 followed a long period of exceptionally slow pace of housing construction (see chart, right panel). The wave of millennials who hoped to graduate from renting to homeownership had little choice but to pay up for what limited supply there was.

In the face of the higher rates of recent years, however, housebuilding in most of the countries in our sample remains higher than it was in the mid-2010s. Banks are strong and "YIMBYs" (who say "yes in my back yard") have pushed local governments to relax planning rules. In the past five years America has added 7.3m homes, compared with 6.1m in the five years before that. In Auckland, the largest city in New Zealand, YIMBYish politicians pushed the number of housing consents to 16,000 last year, a huge rise on the norm before the pandemic. The number of units for sale keeps rising, giving buyers more bargaining power. For the first time in years housing may not be a one-way bet. ■

Insurance

Cloud cover

NEW YORK

Data centres strain insurers

EARLIER THIS month Monte Carlo hosted the annual get-together of the world's insurance firms, including the reinsurers who insure them. The "Rendez-Vous de Septembre" is a swanky affair. Rooms at the main venue can cost over $2,000 per night. Attendees can choose to arrive via helicopter. The organisers discourage any side-events that might compete with the "Official Cocktail". Yet at this month's gathering the gin drinkers' thoughts drifted to less glamorous locales: the dusty deserts, flat farms and desolate shrublands where data centres are being built.

Despite their downmarket locations, such centres are worth vast sums of money. Their owners are thus keen to insure them against natural catastrophes, cyber-hacks and a host of other dangers. Premiums tied to such projects are set to rise from $11bn today to $24bn by 2030, reckons Swiss Re, a reinsurance giant. That makes data centres a welcome source of growth in an industry that is anxious about a looming downturn. But like a good cocktail, the rush can also induce some headaches.

For a start, data centres are big undertakings, physically as well as financially. Although some have been in use—and insured—since the dotcom boom, the greater scale required by artificial intelligence can scramble conventional risk models. The larger the data centre, the greater the chance that a tornado might rip through it. Some 40% of America's data-centre capacity sits in zones often exposed to such dangers, Swiss Re notes. More than a quarter is at risk of being pelted by large chunks of hail multiple times each year. Many centres are clustered together in spots like Virginia and Texas. If a natural disaster affects one, it will probably affect others.

Inside the big boxes, the layouts of many centres also worry underwriters. Operators are eager to place power storage, including lithium batteries, as close as possible to the AI chips. Builders reckon this cheek-by-jowl arrangement helps ensure a consistent power supply. But proximity also increases the chances that a battery fire will engulf semiconductors and other ultra-pricey kit. The concentration of expensive assets, especially chips, in a single building means a single event could inflict eye-watering losses.

The internet has always been vulnerable to power failure, cyber-attacks and other mishaps that can sever connections and disrupt business. These business interruptions are often covered by cyber-insurance policies. But in the case of data centres, such interruptions may be unusually costly, says Alexis Dyschkant of Covington & Burling, a law firm, because of the sheer scale of economic activity that could be tied to a single centre. Given bottlenecks in many parts of the AI supply chain, replacing damaged kit could take a while. The precise terms of coverage will therefore matter a great deal. Some policies may begin payments only after the first 12 or 24 hours of disruption—plenty of time for millions of dollars of losses to occur.

Assuming they can iron out the details of mega-policies, insurers then face a second hurdle: how to fund them. The largest insurance bundles today typically cover up to $8.5bn of value for projects worth up to $25bn in total. Policy writers then cover their own exposure through reinsurance, says Jimmy Keime of Swiss Re. Even if today's coverage limits increase in the coming years, many large projects will be insured to less than half their value.

Projects seeking additional cover will have to get creative. One option is to add on "surety bonds", which already play a role in the industry. They are sometimes issued by insurance companies on behalf of builders at the insistence of the builder's clients. If something goes wrong on a complex project and the builder fails to meet its obligations, the proceeds of the bond can compensate the client.

Indeed, insurance-linked securities as a whole are becoming an increasingly important asset class. CalPERS, one of the world's largest pension funds, has increased its investments in catastrophe bonds and other insurance-linked securities by some 70% this year to about $2.5bn. Although such securities are mainly linked to homeowners' policies, the industry has been chattering about similar products tied to data centres.

Beyond creativity, tech firms will have to rely on their own financial muscle. The "hyperscale" cloud-computing giants like Amazon, Microsoft and Oracle that spend heavily on data centres have deep pockets. The strength of their balance-sheets allows them "to take on quite a bit of risk themselves", notes Darren Tasker of Allianz, an insurance company. Some firms have created their own mini insurance companies to help them handle their exposure. The premiums they pay to these in-house insurers can often be deducted from their taxes. According to *Captive Review*, a trade publication, premiums for such "captive" insurance worldwide rose by 8% in 2025 to roughly $240bn.

For now insurance bosses speak of data centres with glee. But where there are premiums, there will eventually be payouts—possibly big ones. This month Amazon revealed that Iranian drone attacks had damaged some of its Gulf data centres, leading to irreversible losses of customer data. The incident was a reminder of the digital world's physical vulnerabilities, particularly since the Middle East is another data-centre hot spot. A single "shock loss" would not erase the industry, says Caroline St Clair of Aon, a broker. But it might make insurers marginally less gleeful. Drink up those cocktails. ■

Indian capital markets

Trading places

MUMBAI

A long rivalry between stock exchanges is heating up again

FOR DECADES sweaty brows and torn shirts were occupational hazards at the Bombay Stock Exchange (BSE). Brokers jostled and jockeyed, bellowing bids and offers while sealing trades with hand signals. Circulars were printed in Gujarati, the main language of Mumbai's traders. Founded under a banyan tree in 1875, the exchange long dominated share trading in India. Market abuses, such as insider trading, were rampant.

Enter the National Stock Exchange (NSE). Put into operation in 1994, this public-sector initiative offered a single nationwide computerised exchange, linked by satellite phones (India's state-run landline network was not up to the task). Trading was faster and more transparent. The slick upstart quickly displaced its older, clubbier, sweatier rival. Having captured a big chunk of the stock-trading business, the NSE finally listed its own shares on September 24th. They rose by about 4% in their first hour of trading. The sale created a graceful exit route for its existing owners, including some of the public-sector banks that helped birth it.

The NSE surged alongside Indians' interest in stocks—and especially options tied to them. It overtook the Chicago Mercantile Exchange (CME) to become the world's largest market for derivatives in 2019. Over the next five years transactions truly rocketed. In the 12 months to March 2024 it handled 97% of India's options volume. Premium turnover (ie, amounts paid for contracts) averaged about $150bn a month. Transaction fees linked to this trading accounted for about two-thirds of the NSE's operating revenues for that year.

Many of these traders were ordinary punters. User-friendly brokerage apps offered retail investors the chance to get in on the action. Indians responded eagerly, urged on by financial influencers. Their enthusiasm was not always rewarded with success. A study by the Securities and Exchange Board of India (SEBI), a financial regulator, calculated that 93% of futures-and-options traders lost money over the three years ending in March 2024.

The retail pain prompted SEBI to rejig the market. In 2024 it limited each exchange to a single weekly options settlement. That replaced the rotating menu of contracts, settling on different trading days, which previously kept the excitement going. The regulator forced investors to pay the full cost of their trades upfront. It also raised minimum lot sizes, slowing the exchanges' efforts to lure retail investors with small "sachets" of options, as one fund manager put it. Since these reforms, the number of active retail traders has dropped by a fifth.

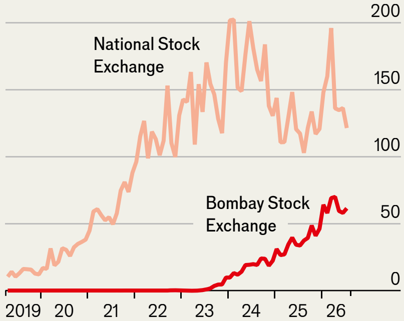
The regulatory restraints have also allowed the BSE to mount a comeback. Its weekly options expired on a different day from those offered by the NSE. That gave traders a reason to use both exchanges, helping the smaller one build volume. The BSE courted small investors by offering cut-rate prices. It also wooed brokers and algorithmic traders, building confidence in its platform, says Geetanjali Kedia of SPTulsian, an investment-advisory firm.

Options on the Sensex, a benchmark index of large-cap stocks, took off. By April 2026 the BSE accounted for over a third of options volumes, measured by premiums paid, up from virtually nothing three years earlier (see chart on next page). Its share price has soared since 2023 on stronger profits and a higher valuation, as investors raised their expectations for further growth. The "BSE was not content on being

The no-sweat exchange

Turnover turnaround

India, monthly options premium turnover, $bn



Sources: BSE; NSE

a silent number two," says Ms Kedia.

Its comeback has weighed on the NSE's own ambitions. The newer exchange, which has to list on its rival's bourse for regulatory reasons, floated at a valuation of $46bn. That is an impressive sum. But it is around 40% below the figure implied by off-market transactions in its shares back in 2024. It means the exchange began trading at a price-to-earnings ratio of around 40 compared with the BSE's 50 or so.

To triumph in this renewed rivalry, the NSE must diversify. It has plenty of models to follow. More than three-quarters of the revenue raised by Nasdaq, an American exchange, comes from non-trading businesses, including selling market data and software to financial firms. Deutsche Börse integrates trading, clearing and settlement under one roof. CME Group, which operates its eponymous derivatives exchange, makes money from currencies, commodities and stock-market indices.

Before its listing, the NSE flagged to investors that selling data was becoming a larger part of its revenues. It has recently launched electricity futures, which allow utilities to hedge against declining prices, and electronic gold receipts, which allow Indians to trade dematerialised bullion. Its management has also pointed out that the market for exchange-traded funds in India is still "tiny"—implying that there is plenty of room for it to become less so.

The punters themselves still seem game. Indian households held almost 27% of their net financial assets in equities and investment funds in March last year, up from about 5% four years earlier. The figure should continue to grow. And both the NSE and BSE can hope to benefit. There is space for two exchanges, says Aditya Kondawar of Complete Circle Capital, a financial-services firm. Indeed the state government in West Bengal, which is hoping to revive another venerable stock exchange in Kolkata, seems to think there is space for three. Despite recent setbacks, India's equity culture remains large and clamorous. No single banyan tree can canopy it all. ■

Israel

The two-tier solution

The war economy is thriving. But an industrial divide is widening

WAR CAN wreak havoc on any economy. But open, knowledge-based economies are especially vulnerable. International connections come under strain; the best minds can flee. Israel's conflicts in the past three years have thus raised many fears for its prosperity. Will its skilled elite stay? Must its Palestinian labourers go?

So far, however, the economic data keeps defying the doubters. Between April and June GDP expanded by nearly 15% at an annual rate. Growth forecasts for 2026 as a whole have been raised. With an election looming, Binyamin Netanyahu, the prime minister, has been in bullish spirits. "I'm not a stockbroker," he said in an interview with American television last month, "but I would say buy anything in Israel, because Israel is going up."

The economy has been on a war footing ever since Hamas attacked in October 2023. GDP briefly contracted under the threat of further strikes and the removal of 200,000 Palestinians, who once manned fields and construction sites. But after this backward step, a furious scramble of activity began. Defence spending ramped up. Wages also rose as firms rushed to replace 300,000 reservists called to duty.

Economists once fretted that such spending would panic investors and warp the private sector. For one tier of industries, these worries have been justified. Construction firms have found it hard to replace Palestinian labourers. Farms, retailers and consumer manufacturing have also struggled for investment.

But Israel's economy has another, more sophisticated tier. Its highly productive tech industry accounted for a fifth of GDP and half of all exports even before 2023. Since the war began, its share of exports has risen further. This higher tier of the economy also contributed nearly half of total GDP growth last year.

The top tier's success has two sources. The first is war itself. Many of Israel's high-tech firms produce defence-related products, from cyber-security software to weaponised drones. The government procures defence-tech from at least 800 Israeli firms. And it is not the only buyer. European countries have also shown an interest, as they seek to diversify away from American suppliers.

The second source of growth is artificial intelligence. Nvidia, which makes the chips that power many AI models, is a notable contributor. It purchased Mellanox, an Israeli supplier of computer products, in 2019. Since then, Israel has become the chipmaker's biggest research hub outside America, with 6,000 employees.

The combined result is that Israel's economy has weathered the war better than expected. GDP rose by over 1% in 2024, twice official forecasts, and by 3.5% in 2025. The government thinks growth ▸▸

Low-altitude but high-flying

will exceed 4% this year. Israeli stocks were among the world's best performers in 2025, rising by 51%. Mr Netanyahu's suggestion to buy anything in Israel would have been excellent advice a year ago.

Unfortunately, the stock market is not the only thing going up. Public debt also rose from 60% of GDP in 2022 to 68% last year, as the government prioritised the urgent demands of the war over the distant claims of the future. The IMF reckons the debt ratio will not return to its pre-war level until 2040 at best. Over that horizon, other threats lurk. Israel could lose some of its innovative magic as its tech workforce atrophies. The country's ultra-Orthodox population, whose men have low employment rates, is the fastest-growing section of society. By 2040 the group will represent over 20% of the population.

Meanwhile many highly educated Israelis are contemplating lives elsewhere, especially if the country's politics retreat further from secularism. These internal conflicts are manifest in the election campaign. The opposition has blocked some of the government's requests for defence spending, unless the money comes from "coalition funds", which have already been promised to ultra-Orthodox parties. It will never be easy to reconcile the triple demands of defence, innovation and devotion. Israel's economy has coped with its military conflicts surprisingly well. But it faces other, slower-moving dangers, less kinetic and more demographic. ■

BUTTONWOOD

X-risk and reward

You cannot trade your way through the AI apocalypse

More than ever, the big questions about artificial intelligence drive the ups and downs of financial markets. The bulls, who think AI will be both transformative and lucrative, stand against the sceptics, who believe the promised returns will never arrive.

But a third sentiment is now coming to the fore for investors: what if AI systems are immensely capable, as the bulls predict, but deeply dangerous? Fears about "misaligned" AI that hacks other systems, enables fraud or misleads human engineers are growing. Researchers in frontier AI labs worry that their tools could help rogue states or terrorist groups build their own bioweapons. Some think the models could result in human extinction, which would take the shine off any future listing. It's hard to celebrate an initial public offering that leads to a terminal public offing.

Tyler Cowen, an economist, wishes the alarmists would put their money where their mouth is. Many place high odds on a catastrophe. If they are right, then intimations of doom should start affecting the markets before the cataclysm actually arrives. The technophobes could therefore test their theories by making financial trades. If they were successful, it would add credibility to their prophecies well in advance of the disaster that would ultimately vindicate them. This call for intellectual accountability is understandable. Alex Tabarrok, one of Mr Cowen's colleagues, once called such a bet "a tax on bullshit". But when it comes to the dangers of advanced AI, the bets can be hard to place.

Some of the milder downsides of powerful AI are already being priced into markets. Concerns about AI-enabled hacking have helped lift the value of cyber-security stocks like CrowdStrike.

Its price, which has more than doubled in the past six months, now stands at nearly 200 times its forecast earnings for the next 12 months. For some companies, fear, not just greed, is good.

Other, untested strategies could work for more adventurous worriers. If cyber-security firms are trading at a premium, then surely the companies most vulnerable to hacking and fraud should be trading at a discount. In the private sector, the health-care, finance, telecoms and transport industries are often targeted. Small and medium-sized firms are more vulnerable than their larger rivals. One way to trade on this logic would be to buy credit-default swaps against the debt of regional banks, for example.

For more conventional perils, such as floods, wildfires or even terrorism, the obvious answer would be to buy insurance products. But the market for AI risk has been slow to develop. Even the physical risks faced by data centres are tough to insure. Earlier this year, Insurance Services Office, a standards-provider for the industry, released a new template that excluded damage caused by generative AI from a wide range of claims. Several big firms have asked regulators to let them leave out such novel threats. That wariness has created a gap in the market, which a handful of startups are aspiring to fill. But for now the firms are piddling in size relative to the task.

The problem faced by insurers has deeper roots. They struggle to cover AI risks, because "risk" is too neat and tidy a concept for what is at stake. In economics, risk refers to quantifiable probabilities. The wild and woolly threats associated with AI are harder to pin down. They are new and poorly understood. The base of evidence is thin. Thus neither the buyers nor sellers of insurance know how to price them.

In the long history of human pessimism, there have been many doomsayers who were fast and loose with their predictions. People who scream and shout about supply-chain collapses, hard landings or financial meltdowns could easily make money from their prophecies, if they were as far-sighted as they claim. But AI is different. At the most extreme end of the spectrum, the dangers are intrinsically unhedgeable. Even if you could calculate the chances of an existential threat, there is not much point in buying protection from counterparties that will not be around to pay up.

In the case of an "AI takeover", where humans are subjugated or sidelined, the big winners will be the AI beings taking charge as the dominant forms of life on Earth. They would make the natural counterparties in any insurance policy a doomsayer might want to buy. But even if this were possible, a superintelligence would make a tough negotiating partner. Unlike humans, they would probably read the small print.

Turkey

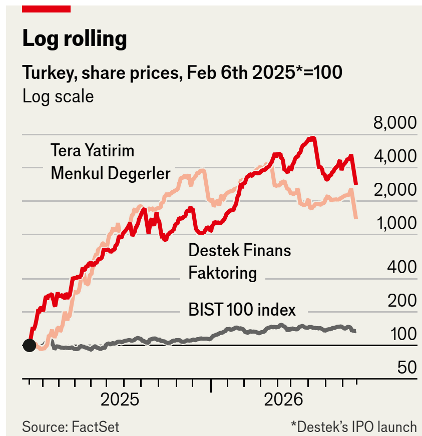
Anatomy of a fall

ISTANBUL

A bubble bursts on the Bosphorus

THE NUMBERS seemed too good to be true. Dozens of investment funds—and the financial groups behind them—posted spectacular returns, propelling Turkey's stock market to record highs. One asset manager, Tera, saw its main fund soar by over 60,000% in only three years. Another financial firm, Destek Finans Faktoring, became Turkey's second-biggest listed company barely 17 months after going public, as its share price rose by 7,000%.

Now the bubble has burst. First, Tera and several other asset managers failed to pay investors seeking to cash out. Then details emerged of what one official called "Ponzi-like" schemes some other firms are alleged to have run. Turkey's main stock-market index fell by over 5% on September 16th. In only two days the scandal wiped some $30bn from the market (see chart).



To mop up the mess, Turkey's market regulator has moved to liquidate 131 investment funds. They are estimated to hold roughly $18bn in assets between them. At least 450,000 investors are now bracing for a painful haircut and a long wait for whatever money remains. Some of the people behind the schemes may be facing prison terms. Police have already rounded up scores of finance bosses, including Tera's chairman, on suspicion of market fraud. Others have had their assets frozen.

The scandal did not come out of the blue. As early as last year Turkey's finance minister, Mehmet Simsek, pointed to signs of stock-market shenanigans and pledged new regulations. Meanwhile evidence mounted that some funds were buying thinly traded shares, including stakes in their own subsidiaries, to drive up their value. When prices jumped, they could report big gains to reel in new investors. They could also borrow against the newly expensive shares to buy more. In June MSCI, an index provider, hinted that unless regulators took action, Turkey risked being downgraded from an emerging to a frontier market. It would then join an asset class populated by much smaller economies such as Tunisia and Romania.

Officials were slow to respond to these alarm bells. Only in late August did Turkey's capital-markets board try to stop funds from cornering the market in the shares of individual companies. Fund managers scrambled to comply with the new rules by unloading their holdings. Prices tumbled. Investors began to head for the doors. The doors were then slammed shut.

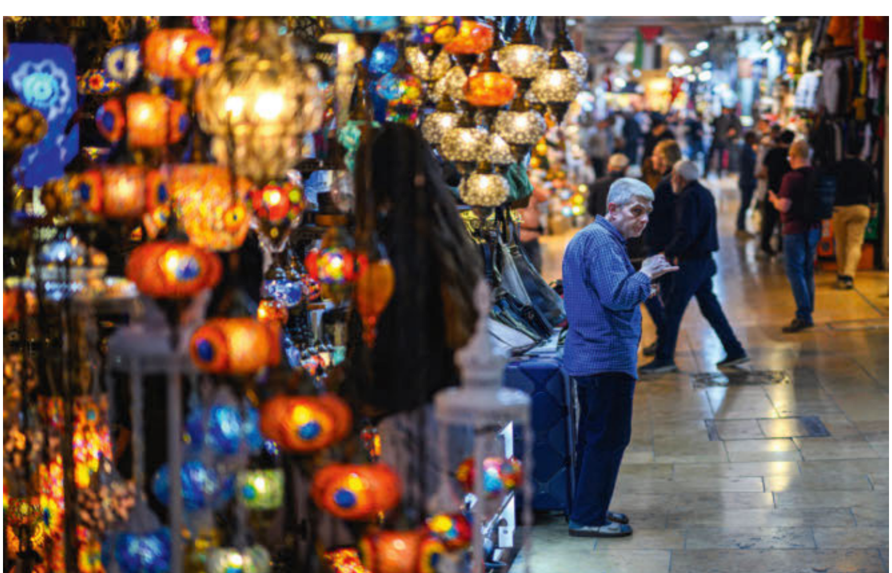
Those who had sounded the alarm were ignored, or worse. A former deputy head of Turkey's financial-crimes watchdog says he was detained by police on two occasions after he complained about Tera. The same firm also threatened legal action against reporters and social-media users who accused it of wrongdoing.

Mr Simsek has rushed to calm nerves. The crisis, which he blamed on a few rotten apples, had been contained, he said on September 18th. "There's no systemic risk," he added. Foreign investors seem to agree. "This is not spreading through the broader economy," says Viktor Szabo, a portfolio manager at Aberdeen, a wealth-management company. Fears of dollarisation have turned out to be misplaced. Rather than moving into hard currency, Turkish investors who pulled out of the stock market seem to be parking their money in high-interest lira deposit accounts.

Confidence in Turkish financial markets has once again been shaken, however. In recent years Turkey's president, Recep Tayyip Erdogan, has touted Istanbul's prospects as a global financial centre. The country has also hoped to attract some of the capital fleeing the Gulf in the wake of Iranian drone and missile attacks. The investment-fund fiasco has dealt those ambitions a serious blow. Outside investors had already regarded Turkish equities as a "Wild West market", says Timothy Ash of RBC BlueBay Asset Management. "Why would anyone have confidence in the regulatory environment after all this?"

Arresting dodgy fund managers may not be enough. Turkey should investigate why regulators were so slow to act, analysts say. They could also examine claims that some of the asset managers responsible for the mess had enjoyed political protection, notably from members of Mr Erdogan's entourage. Neither investigation appears to be on the cards.

The scandal is a symptom of a wider malaise. Ordinary Turks have long been seeking protection from rocketing consumer prices. Inflation exceeded 80% in 2022 and remains about 30% a year. Lured by the promise of high returns, many investors, including wholly inexperienced ones, piled into equities, including highly volatile shares. They learnt a painful lesson: in Turkey consumer prices only go up, but share prices can also go the other way. And when a stock rises by 7,000%, it's cause for concern, not celebration. ■



Bazaar goings-on

FREE EXCHANGE

How the Fed should measure inflation

Pinning down the underlying rate may be harder than Kevin Warsh thinks

IN THE EARLY 1970s Arthur Burns had an inflation problem. As one supply shock followed another, the pipe-smoking Federal Reserve chairman, known as the "Pope of Economics", responded by excommunicating prices he blamed on "special factors". The Arab oil embargo pushing up crude? Look past energy. A collapse in Peru's anchovy harvest driving up feed costs? Strip out food. When inflation still looked too high, out went used cars, home purchases and mobile homes. Even rising jewellery prices were blamed on "gold mania" and waved away, as Stephen Roach, then a young Fed economist, later recalled. In search of the one true inflation rate, Burns kept narrowing the canon. Inflation, meanwhile, was becoming ever more catholic.

Half a century later Kevin Warsh has taken up the same challenge. The Fed's new-ish chairman has made a mission out of pinning down underlying inflation ("underlying" is fast becoming his favourite adjective). Yet he has dismissed the usual guide, "core" indices excluding food and energy, as a "rough swag" for where inflation is headed. Mr Warsh instead prefers "trimmed averages", which exclude the biggest price swings, and measures of inflation's breadth. On September 16th he complained that prices were rising by more than 3% in "too many" product categories. That was one reason why the Fed raised interest rates for the first time in three years. He has even sent a task-force hunting for cleaner, timelier economic signals. Can Mr Warsh get closer to the underlying trend without stumbling into Burns's trap?

Underlying inflation is, roughly, the part of today's inflation most likely to still be there tomorrow. In a market economy, individual prices are always moving around. A drought makes coffee dearer; a glut makes cars cheaper. In August prices for mobile-phone services mysteriously jumped by nearly 6% in the space of a month. Such idiosyncratic movements can move headline inflation without saying much about the broader trend. Central bankers therefore try to look through the one-offs, training their gaze instead on the underlying movement in the general price level.

After the supply shocks of the 1970s, a simple shortcut took hold: strip out volatile food and energy prices. The resulting "core" measure replaced Burns's discretion with a fixed rule that usually gave a better steer on where inflation was headed. But it is a crude shortcut. As Jim Dolmas and Evan Koenig of the Dallas Fed put it, "Not all food and energy items are equally volatile, nor are all of the most volatile items exclusively food and energy." Restaurant prices get thrown out despite being fairly stable, whereas more volatile categories such as airfares and hotel rooms stay in. It is, indeed, a "rough swag".

Economists have long looked for a better swag. In a paper from 1994 Michael Bryan, then of the Cleveland Fed, and Stephen Cecchetti of Brandeis University built a model showing how lopsided movements in individual prices can obscure the common inflation trend. Their answer was to rank price changes and focus on the middle—either by chopping off the extremes before taking an average, or simply by taking the median. In their data, the median did a better job of forecasting future inflation than either the headline consumer-price index (CPI) or the index excluding food and energy. Later research has generally found that such trimmed measures can provide a cleaner signal of durable inflation.

The idea has been put to work. The Cleveland Fed publishes a median and trimmed CPI. *The Economist*'s predictive inflation tracker downweights extreme price movements rather than discarding them. Yet pruning can work badly if price patterns shift. The Dallas Fed releases a trimmed-mean measure of changes in the price index for personal consumption expenditures (PCE). For decades the biggest price falls tended to be larger than the biggest rises. So the Dallas Fed used an uneven cut, dropping the bottom 24% of price changes and the top 31%. That made sense when inflation was low; less so once more prices began to rise.

During the inflation surge of 2021, the Dallas measure started stripping out too many genuine price increases. The problem persists. In April researchers at the Dallas Fed warned that their gauge may still be understating inflation. They have since produced an alternative that cuts more evenly from both ends of the distribution. It would have picked up the surge in 2021 much sooner. For the year to June it put underlying inflation at 2.6%, against 3.3% for core PCE. But any trimmed measure is calibrated to how prices behaved in the past. If that pattern shifts, as it often can in periods of high inflation, the measure risks trimming away part of the inflation it is meant to capture.

The 500,000,001st price is right

Mr Warsh thinks the Fed can do better. Part of his answer is more timely, granular data. The Billion Prices Project, pioneered by Alberto Cavallo of Harvard University and Roberto Rigobon of the Massachusetts Institute of Technology, gathered millions of online prices each day to track inflation almost as it happened. The Fed chair wants similar feeds to supplement official statistics. But more prices do not necessarily reveal the trend. To find it, Mr Warsh prefers to focus on the middle. Earlier this year he imagined assembling a billion prices and said what really mattered was what was happening to the "500 million and one" price.

That may be an improvement, but the median has a blind spot. A large minority of prices can surge without moving the middle much, as happened in 2021, when median measures understated the underlying trend. The episode is a reminder that no rule will perfectly capture underlying inflation. The temptation, then, is to compensate by deciding which prices to ignore. That was the cardinal sin of the Pope of Economics. Mr Warsh would do better to take a leap of faith and embrace an imperfect rule. ■

Science & technology

Surgery

Knives out

Randomised controlled trials are revealing many surgeries to be unnecessary

EACH YEAR, according to the World Health Organisation, over 300m operations are conducted worldwide. Patients in the rich world are more likely to go under the knife—about 60% of people in England are expected to undergo surgery at least once in their lifetime. Some of these procedures are clearly life-saving, such as organ transplants and emergency Caesareans. But as the number of other operations continues to grow, some in the field are starting to ask an awkward question: how many are really necessary?

Answers have long been hard to come by, in part because few randomised controlled trials (RCTs), the gold-standard type of research used to assess medications, were conducted on surgical procedures. That made it difficult to know if patients got better more often with surgery than they might have without. This is now changing. The number of surgical RCTs funded by Britain's National Institute for Health and Care Research increased from 34 in 2011 to 188 in 2023, and national surgical-trials programmes are active across Europe as well as in Australia and Canada.

The results are upending the field. Removing an inflamed appendix, an operation that around 5-10% of people have had at some point in their life, has turned out to be no better for most patients than a course of antibiotics. Trials comparing different surgical techniques have also revealed that cheaper and less complex operations can be more effective. Most striking, the data show that some widely used surgical procedures, such as spinal fusions and rotator-cuff repairs, have effects indistinguishable from placebo or non-surgical care such as physiotherapy.

Worse, some types of surgery may do more harm than good. A trial in Britain found that prostate-cancer surgery had no effect on patient mortality 15 years on, but worsened sexual and urological problems. A Finnish trial of a common knee procedure, meanwhile, concluded that patients who had real surgery had more problems in the affected knee ten years on than those who had had sham surgery (anaesthesia followed by a superficial incision). David Ring, an orthopaedic surgeon at the University of Texas at Austin, reckons that most operations in his field may be unnecessary. Surgery itself, it would seem, could use a major intervention.

If so many operations are unnecessary, how to explain the fact that patients often leave the operating table feeling better? In a study published in 2022 in *JAMA*, a journal, researchers pooled data from 100 surgical trials covering 32 interventions. They found that two-thirds of the improvement ▸▸

→ ALSO IN THIS SECTION

patients felt after surgery was due, on average, either to the body healing on its own or else to the placebo effects of feeling cared for and prepped for surgery. Only one-third of the benefit, in other words, came from the procedure itself.

"Surgeons think they're effective because they are administering a potent placebo," says Seth Leopold, an orthopaedic surgeon at the University of Washington. In a landmark trial on 165 patients in 2002, led by Bruce Moseley from the Baylor College of Medicine, in Houston, the surgical team even splashed water in a dish to mimic the sound of tissue debris being flushed out from the knee joint. (Though patients were under general anaesthesia, the study team were mindful the placebo effect might depend on stimuli registered by the unconscious brain.) The trial found that the surgery was no better in alleviating pain than the sham operation.

Natural healing is also powerful, if slow-acting. In the 2022 study in *JAMA* the researchers compared real and sham surgeries with standard non-surgical care for a subset of procedures on which data were available. They found that the placebo effect could explain only a small part of the improvement in the sham-surgery group. Most of the benefit came instead from natural improvement.

Achieving changes in clinical practice has proved difficult. Surgeons continue to perform some operations that have been shown to be no better than placebo surgery at the same rate as before. They find it hard to believe that something which they have been doing for years and seems to help their patients is, in fact, useless, says Ian Harris, a surgeon at the University of New South Wales, in Sydney. That occasionally leads to what he describes as outlandish criticisms. In 2014, for example, a group of surgeons wrote a commentary on the use of sham surgery in trials in *Arthroscopy*, a medical journal, in which they worried that "Patients who may not be of entirely sound mind are selected as research subjects, and research performed on such individuals would not be generalisable to mentally healthy patients."

Operating theatre

"You have to remember surgeons have no uncertainty," says Jane Blazeby, a surgeon at the University of Bristol who has conducted many such trials. "They always know what's best," she adds, archly. This certainty is not always justified: research has shown that, for one common type of knee surgery, surgeons' predictions about whether a patient will improve is as good as flipping a coin. Surgeons who have been doing a procedure for years also tend to overestimate its benefits, says Stefan Lohmander from Lund University, in Sweden, because the patients who return for check-ups are mostly those who got better. Moreover, many of these returning patients do not want to disappoint their doctors, says Dr Lohmander—which may, in part, be why surgeons often feel procedures are more successful than their patients do.

For Dr Blazeby, convincing her colleagues to enroll their patients on randomised controlled trials required teaching them to "confidently be unconfident", she says. Such trials required them to tell patients that an operation they had been doing for years might not be the right choice for them. Encouragingly, younger surgeons are more open to change. Studies in America and Australia, for example, have found that the probability that a surgeon stops performing a procedure a trial has shown ineffective decreases with time. And when trial results reinforce each other, scepticism becomes less tenable.

The nature of a country's health system also plays a role. Disfavoured operations decline faster in countries where surgeons are salaried, as in Britain and Scandinavia, than in countries such as America where they are paid per operation and act as small businesses. Shoulder surgeries to remove a bone spur fell from 28,000 in Britain in 2016-17 to 5,720 in 2019-20, after trials found that the procedure was no better in alleviating pain than sham surgery. In America the procedure remained popular.

But it is not just surgeons who need to trust the data: a growing number of patients insist on surgery on the basis of inconclusive tests. All too often, says Dr Ring, scans reveal abnormalities that are little more than tissue tears; as natural a by-product of ageing as wrinkles and grey hair. What's more, he says, these things are unlikely to be what is causing patients' problems. A growing number of studies, in fact, show that the abnormalities in knees, backs and shoulders that orthopaedic surgeons try to fix are very common in people who have no symptoms at all.

But the promise of a quick fix is hard to resist. "It is becoming more and more difficult to say 'no' to the patient," says Dr Lohmander. In America some surgeons fear their patients will leave them a bad review online, and insurance companies still cover ineffective procedures for fear of losing customers to their competitors.

Even more trials should help doctors hold their ground more firmly. For now, most non-essential surgical techniques remain untested against either sham surgery or non-surgical interventions. A review in 2020 found that just 1% of the RCTs on common surgical procedures conducted for chronic musculo-skeletal pain compared doing the surgery to not performing the procedure at all. To fulfil their Hippocratic promise of doing no harm, surgeons must be prepared to ask how much good they are actually doing. ■

Space

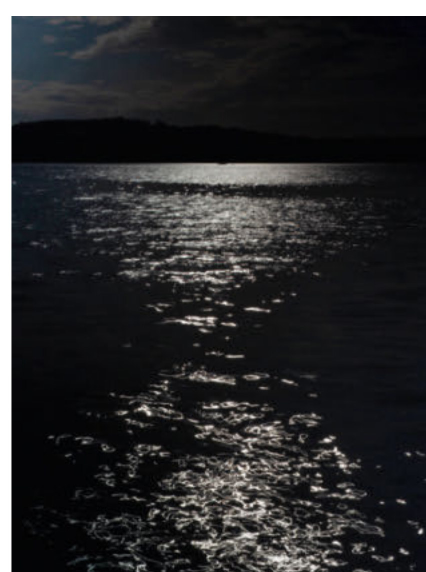
Instant sunshine

An American startup plans space-going mirrors to turn night into day

IN THE NORMAL course of things, night follows day. But if a Californian startup called Reflect Orbital gets its way, that might become optional. The firm, which has raised over $28m in funding since it was founded in 2021, hopes to fly tens of thousands of highly reflective mirrors into space, and then use them to illuminate dark parts of Earth on demand. The idea is to provide solar power after sunset, help with disaster relief and perhaps even replace streetlights in cities.

Sunlight-as-a-service is not a new idea. It was first proposed by Hermann Oberth, a rocketry pioneer, in 1923. NASA gave the idea a more thorough going-over in a study published in 1977. Russia got as far as testing the idea in the real world: in 1993 a satellite called *Znamya-2* unfurled a 20-metre-diameter mirror which produced a (very dim) spotlight 5km across on Earth's surface for a few hours before burning up in the atmosphere.

Reflect Orbital hopes to fly its first test satellite, *Eärendil-1*, later this year. (As is now de rigueur in American tech circles, the satellite's name is drawn from J.R.R. Tolkien's books.) When it reaches its 625km orbital altitude, four long booms should extend from its body. Sheets of ultra-thin plastic, coated with highly reflective aluminium, will be stretched between the booms, producing a mirror with a surface area of 160 square metres—about the



In the spotlight

size of a volleyball court. If all goes to plan, the satellite will reflect a patch of light about 5.5km across onto Earth's surface.

The firm calculates that 76 satellites, in the right orbits, would be enough to provide sunlight—in patches about as bright as a full moon—on demand anywhere on Earth. The firm's long-term plan is to fly tens of thousands of considerably larger satellites, merging the beams from many at once to provide much more intense light. About 120 of these would fit inside a single one of SpaceX's Falcon 9 rockets, says Ben Nowack, one of the firm's founders.

Reflect needs lots of satellites to make its main business plan work. The firm plans to fly them in specially designed polar orbits that ensure they will always appear over a given part of Earth at the same local time each day. It hopes to use them to boost production from solar-power stations, by focusing extra sunlight onto their panels in the evening and early morning—the times at which demand on the grid tends to be greatest, power prices highest, and solar generation low. A ring of satellites could serve several different solar farms in different parts of the world as Earth rotates beneath it.

Sceptics will point out that a technology already exists that allows solar farms to shift their output to different times, in the form of batteries—and that the costs of these are falling rapidly. But Mr Nowack argues that his satellites will complement batteries rather than replace them. As more and more intermittent solar generation is added to a grid, he says, the costs of providing enough battery backup to ensure the lights always stay on rises quickly. He hopes that boosting the hours over which solar panels can generate electricity will reduce the need for the sorts of rarely used (and thus expensive) batteries a solar-heavy grid requires.

And electricity generation is not Reflect's only plan. The firm also aspires to provide extra hours of daylight to help with emergency rescue, for instance, or to allow work (or play) to go on later into the night at farms, opencast mines and ski resorts. Cities might be interesting customers, says Mr Nowack, since the ability to spread the cost of reflected sunlight over millions of inhabitants might make it cheap enough to replace street lighting.

Grand plans. Could any of them actually happen? Reflect sits at the convergence of three trends, says Colin McInnes, an engineer with an interest in reflected solar energy at the University of Glasgow: "growing demand for solar power, falling rocket-launch costs, and a growing interest [after the success of SpaceX's Starlink satellite-broadband service] in building large space structures". Dr McInnes and his colleagues have run several studies examining how a constellation of reflecting satellites might work. One, published in 2022, concluded that a flock of space-going mirrors might indeed be economically viable—provided launch costs fell to at least a third of current levels. With SpaceX's giant Starship rocket inching closer to readiness, that could well happen.

Not everyone would be happy if Reflect's sums did indeed add up. Starlink has already caused dismay among astronomers, since light reflected from the satellites interferes with pictures taken by their telescopes. Satellites designed to be reflective could be much worse. A preprint paper, published on August 6th by Miroslav Kocifaj, a light-pollution expert at the Slovak Academy of Sciences and his colleagues, estimates that it would be impossible to see any stars at all from inside the beam of any one of Reflect's larger satellites. If 400 such satellites were to combine their beams—about the minimum needed to make solar panels produce electricity, reckons Dr Kocifaj—the resulting glow might be visible from 80km away.

Mr Nowack is conciliatory: the satellites can be easily turned off by changing their orientations, he claims. And he says that Reflect plans to implement exclusion zones around big telescopes where illumination would be forbidden. "If we don't get this right," he says, "we could be regulated out of existence." ■

Entomology

Put to bed

Are bed bugs becoming resistant to all pesticides?

Stuff of nightmares

THE BEDTIME blessing, "Good night, sleep tight, don't let the bed bugs bite", had pretty much lost its true meaning by the 1980s, for good reason. After supping on sleeping humans for millennia, bed-bug populations had collapsed in rich countries in the face of modern pesticides. In mere decades the insects had gone from scourge to myth.

Then came their nightmare comeback. During the late 1990s bed-bug infestations surged in Australia, Europe, North America and parts of Asia. Air travel, the theory went, was shuttling them around and fuelling the rise of an insecticide-resistant global super-pest, as bugs that had survived exposure to different pesticides in different places mixed their genes.

It was a great theory. So great, in fact, that nobody got around to checking it. That is until Warren Booth, an entomologist at the Virginia Polytechnic Institute, realised that modern genetic methods had simplified a task that was tricky and expensive in the 1990s. He reasoned that if bed bugs' resurgence had been caused by insects from around the world sharing resistance genes, then they should have become much more genetically similar to one another by the late 2000s.

As they report in the *Journal of Pest Science* this month, he and his colleagues tested this hypothesis by analysing the DNA of bed bugs that had been collected between December 2009 and January 2011. In total, they had 971 individual bugs to work with, collected from 109 American, Canadian and European populations. They expected to discover the same mix of anti-pesticide mutations in most of them. But that was not what they found.

They learned, instead, that bed bugs from different places carried different genetic signatures. In particular, a double mutation found in American bed bugs, which provided potent resistance against pyrethroid insecticides, was almost absent in Canada and Europe. Contrariwise, another, weaker, mutation was present in Europe but absent elsewhere. Had transatlantic travel been shuffling the gene pool, the American super-gene would have established itself in European bedrooms.

Dr Booth's proposed explanation is that, while years of insecticide use drove bed-bug numbers into drastic decline, the failure to eradicate them completely created isolated "island" populations, disconnected from one another for decades. As Charles Darwin's Galapagos finches demonstrate, island isolation fuels rapid evolution. Surviving populations may then have evolved resistance locally before bouncing back stronger than ever. The bugs that infested hotel beds in the late 1990s were thus not foreign invaders, but rather patient home-grown horrors. ■

Medical imaging

No paper trail

A dissolvable battery could make edible electronics safer

DEVICES THAT peer into the human body from the outside, like X-ray scanners and MRI machines, have transformed medicine. A new generation of ingestible sensors could do the same from the inside. But these require power, and as standard batteries contain harmful chemicals, swallowing them is generally inadvisable.

A new study, led by Giovanni Traverso of the Massachusetts Institute of Technology and published in *Nature Chemical Engineering* on September 21st, offers one solution: a paper-based battery whose components are safely absorbed by the body at the end of its useful life.

The battery is a wax-coated stack of magnesium, gel and chemically active paper. It generates a current as the magnesium reacts and releases electrons, and takes up only about a quarter of the space inside a standard gelatine capsule, leaving plenty of room for the device it is to power, as well as other useful payloads, such as a drug.

The researchers hooked their battery up to an electronic tracker, packed it into a gelatine capsule and fed it to pigs (favoured over mice because their guts are large enough to mimic a human's). The battery allowed them to track the capsule's location. Next they tried running a capsule which electrically stimulates the gut—a more power-intensive task, often used in people to encourage the stomach to empty—finding the battery could galvanise the pigs' guts for 20 minutes. The battery's life expectancy inside the harsh environment of a pig gut was about three days.

The work is an important step towards a wider range of swallowable devices, says Yasser Khan, a researcher at the University of Southern California who was not involved in the study. But the device still needs safety testing. "We need to know exactly what the battery breaks down into, how much of it the body absorbs, and whether any of it irritates or harms the gut," says Dr Khan. "Especially if patients swallow these devices again and again."

Another approach is to turn foodstuffs into batteries. A team at the Italian Institute of Technology in Milan, for example, have built a battery from ingredients including riboflavin (vitamin B2), extracts from capers and nori seaweed. Unlike the paper battery, it does not yet generate enough juice for useful applications, but it is cleared for human consumption. Less lithium, more lunch. ■

Well Informed

Should you take Vitamin D supplements?

They look good in theory, but seem less so in practice

THE AUTUMN equinox, which fell this year on September 23rd, is a glum milestone, at least for people in the northern hemisphere. The days are shortening and the nights lengthening; around the equinox they cross over, and the winter gloom begins in earnest.

One group that might welcome the shorter days is the supplement industry. Sunlight—specifically, the chemical reactions caused by ultraviolet radiation falling on bare skin—is necessary to make vitamin D, a compound vital for health. As the sunlight fades, interest in vitamin D supplements—as measured by searches on Google—rises.

In fact, vitamin D is one of the most popular supplements on the market. One paper published in 2017 reported that 18% of Americans took large doses of supplementary vitamin D in 2013-14, up from 0.3% in 1999-2000. More than 10m blood tests are performed to measure levels of the stuff each year. In Britain and Iceland supplements come with the government's stamp of approval.

So, should you take any? Vitamin D is a rare case of a supplement with a lot of good medical theory behind it. Doctors have known for a century that vitamin D is necessary for health: lack of it causes rickets, a disease in which the bones soften and deform. But research had suggested it might have other powers, too. Scientists have found vitamin-D receptors everywhere in the body, from the intestines and the kidneys to the brain and muscles. A series of influential studies in the 1980s found that deaths in America from several kinds of cancer were significantly more common in northern states than sunny southern ones, and proposed vitamin D as the explanation. Others thought a shortage of the stuff might explain why colds surge in winter. And animal studies suggested that vitamin D could indeed inhibit the growth of cancer cells.

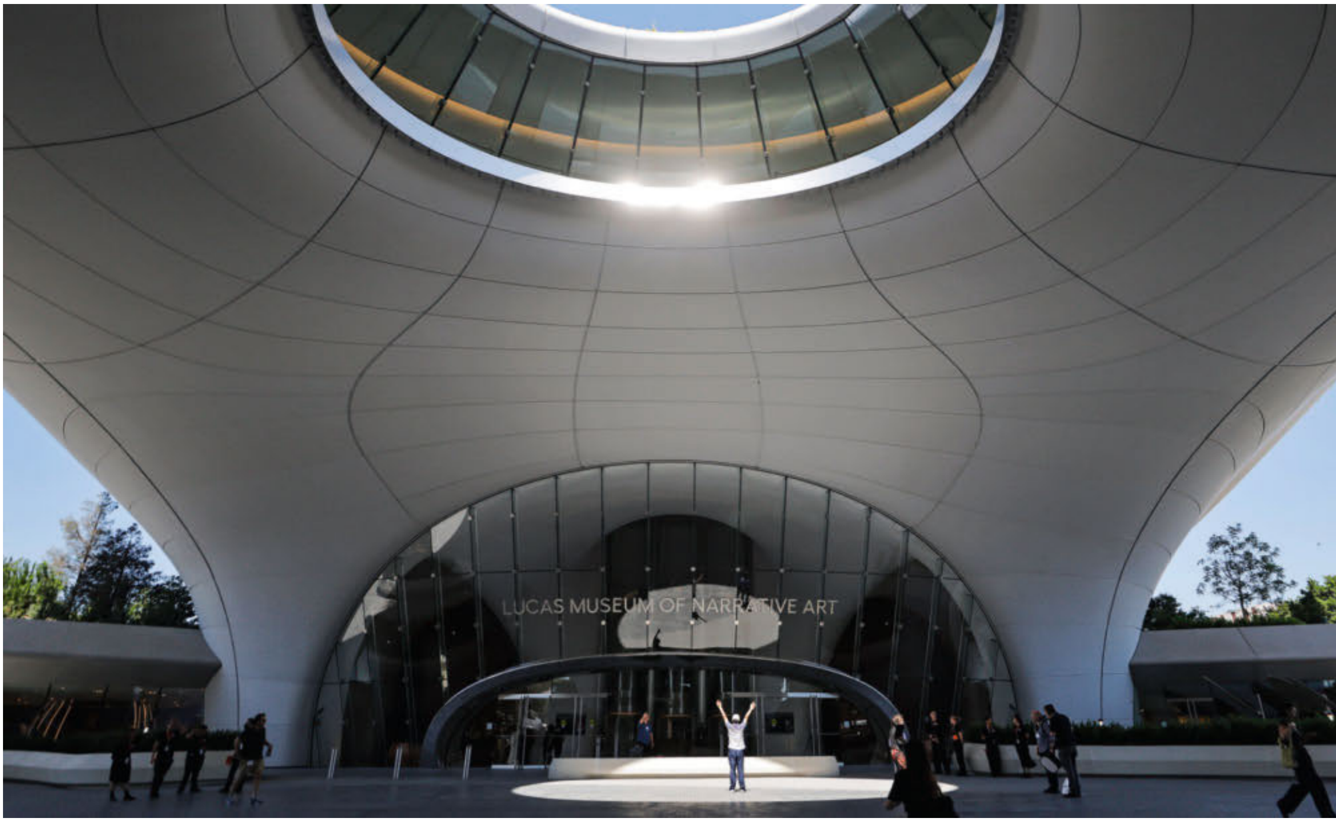
So when human trials began, hopes were high. But despite what the theory said, practice had other ideas. Three big trials of vitamin-D supplementation—the VITAL study in America, the D-Health trial in Australia and the ViDA study in New Zealand—followed tens of thousands of people over several years. None found any detectable benefits.

A summary editorial, published in 2022 in the *New England Journal of Medicine,* noted that vitamin D seemed to have no effect on cancer risk or heart health, another hoped-for benefit. It did not prevent falls, boost the brain or stave off the sniffles. Researchers found no beneficial effects even in people considered mildly deficient. Despite the link to rickets, the supplements also failed to reduce the risk of bone fractures.

The failure is a useful reminder that, despite centuries of research, the human body is sufficiently complicated that medics can at best make only educated guesses about exactly what a new drug or supplement will do to those who take it. Sometimes those guesses are wrong. There is still no substitute for just giving the drug in question to a lot of people and looking carefully at what happens.

These days, the conclusion is that a minimum amount of vitamin D is necessary, but that taking more is unlikely to do much good. If you live a long way north or south of the equator, if you have dark skin, if you spend most of your days indoors and if you don't get much vitamin D from your diet (fish, eggs and red meat all contain at least some), then supplements might be a good idea, at least in the darkest months of the year. For everyone else, it is probably better to save your money.

Culture



George Lucas's new project

Pictures for the people

LOS ANGELES

The Lucas Museum of Narrative Art aims to upend convention. It succeeds, in ways both good and bad

THE DEATH STAR was nearly 100 miles from side to side and could attract people's attention by blowing up their planets. The new Lucas Museum of Narrative Art, founded in Los Angeles by George Lucas, the creator of "Star Wars" and "Indiana Jones", is more modest in size and uses gentler methods to woo eyeballs. Still, at 300,000 square feet (28,000 square metres) and with a reported price tag of $1bn, it is one of the most conspicuous and intriguing museums to launch this decade anywhere in the galaxy. But will Mr Lucas's blockbuster project, which opened on September 22nd, be remembered as an inspired creative endeavour or an expensive and flawed edifice complex?

It is an unusual institution. Outside, the museum resembles a white spaceship destined for another solar system. Inside, it looks like a prop-heavy Hollywood set designed to look like a museum.

There are screens displaying digital copies of masterpieces held elsewhere, from Trajan's column to Michelangelo's frescoes in the Sistine Chapel and works from the Louvre. There are two plush cinemas where visitors can watch documentaries and older films, including some of Mr Lucas's work. There is a "portal"—otherwise known as a lobby—with no right angles and futuristic glass lifts that shoot you up to the galleries.

And then there are actual props: 7% of gallery space is dedicated to "Star Wars". You can marvel at Luke Skywalker's landspeeder and Anakin's podracer. Here are costumes; over there are characters. R2-D2 stares out, beepless, from a corner.

Nearby are more conventional galleries, filled with unconventional art, from children's-book illustrations to posters. Mr Lucas and his wife, Mellody Hobson, started the museum to display their personal collection. Its focus is "narrative art", which tells a "story". Though you might wonder: don't most images do that?

Mr Lucas decided to create his own museum after he visited one and asked to see any pieces by Norman Rockwell, an American painter and illustrator whose work Mr Lucas collects. That museum did not have their Rockwell on view. (Some have dismissed him as a commercial illustrator and not a fine artist.) Mr Lucas was incensed and decided, as only a billionaire can, to launch his own museum to give illustration its due. "Illustrators create pictures for the people," according to Mr Lucas. "It does not require special knowledge. It does not need to be explained."

This museum has been around 15 years in the making. It is in Los Angeles only because Mr Lucas did not succeed in basing it in two other cities, San Francisco and Chicago, due to local opposition over architecture and its potential location on public park land. The new museum has a gallery displaying the other proposed ver-

→ ALSO IN THIS SECTION

sions. It is a shot at opponents, who missed out on jobs and visitor spending.

Yet there is something so cinematic, commercial and kitsch about the museum that it feels as if it ended up in the right city: home of the Hollywood hills and tills. The museum exhibits a certain scorning of traditional expertise. Both the director and chief curator left in 2025, hinting at a clash between professional judgment and the founder's desire for control. Mr Lucas has been acting as the chief curator himself.

There is barely any wall text to help explain what things are and why they matter. (People can use their phones to get short texts about some works.) What was Mr Lucas wanting to say by putting a Van Gogh sketch of a mother and child next to a work by Rose O'Neill, the cartoonist behind the cutesy Kewpie doll? What are visitors meant to make of authentic older paintings, including ones by Artemisia Gentileschi and John Singer Sargent, which struggle to compete with neighbouring screens with bright digital reproductions?

Those not steeped in art history—precisely the people Mr Lucas is hoping to attract to his "accessible" museum—need lots of guidance, not a little. But "it was very important that there was not too much explanation in each gallery," says Tracey Bates, the chief executive of the museum. "George has always wanted the vision that you're looking at the image and not the history lesson at the side of it."

This jumbled, almost information-less approach is in vogue, including at the new David Geffen Galleries at the Los Angeles County Museum of Art, which cost $724m. (With so much money and so much space, few museums have achieved so little.) It tries to upend conventional hierarchies, mixing old and new works without curatorial comments. It is a "less is more" approach, explains a slightly apologetic guard, who acknowledges more explanation may have helped.

What has Mr Lucas learned from other museums started by rich philanthropic collectors, from the Frick in New York to the Getty in Los Angeles? "This has not been influenced by...other museums," says Ms Bates. "George and I have never had a conversation about what other museums are up to."

Yet he is part of a tradition of philanthropists leaving art as a legacy. "This type of museum is so selfish and so civic at the same time," says Anne Higonnet, a professor of art history at Barnard College. "Only time will tell if one outweighs the other." That will partly depend on how it changes after the founders' deaths.

Snooty critics may sneer at Mr Lucas's handiwork. But many visitors will find much to delight them in the museum. They will want more about how Mr Lucas sees his collection, not less. ■

The most irritating tax of all

Why governments waste your time

The Time Tax. By Annie Lowrey. *Ecco; 352 pages; $32 and £32*

WHEN JEFF MILLER, a writer from New Jersey, moved to Massachusetts, he was denied a driving licence for being a felon. But he was not a felon. He had been confused with another Jeff Miller, born on the same day in the same state.

So he applied for a letter confirming that he was the non-criminal Mr Miller. This required his original paper social-security card, which he had lost, and his original paper birth certificate, which meant asking his mother. After weeks of hassle he got his letter and thought the problem was solved. But when he moved to Oregon, the same thing happened. Then he was detained at an airport. Why, he wondered, do I have to keep proving I'm not the other Jeff Miller?

His travails are a symptom of a wider problem. Governments often treat your time as if it had no value. As monopolies, they know you cannot shop elsewhere for a passport or permit. So whereas it takes only one click to have Thai food delivered to your door by a private firm, the form for people in Michigan seeking public support until recently had 1,000 questions, many in impenetrable bureaucratese and some pointlessly intrusive (such as "what is the date of conception of your children?").

America is not the worst offender. But as Annie Lowrey describes in "The Time Tax", it is unusually bad for such a rich country. Americans spend five times as much time on government form-filling as Danes, Brits or South Koreans. Whereas the much poorer and more numerous citizens of India all have a digital biometric ID, Americans are still shuffling paper.

Paper jam

Wasting the public's time is a bipartisan sin, argues Ms Lowrey, a top-notch journalist at the *Atlantic*. Cold-hearted Republicans want to make it hard to claim benefits, she writes, so "they obsess over fraud and use it as a justification for making programmes impossible to use." Micromanaging Democrats "love too-complicated-by-half means-tested measures, like tax credits for rural broadband users...They load straightforward initiatives up with so many conditions and choke-points that they fail to deliver."

The government can act quickly when it absolutely has to. When covid-19 struck, Donald Trump's "Operation Warp Speed" helped drug firms produce a vaccine in seven months—a process that would normally take a decade or more. This is less than the time the authorities in San Francisco spent pondering one application to open an ice-cream shop, without ever reaching a decision. The applicant, Jason Yu, spent $200,000 trying to answer objections from NIMBYs and then gave up, having nearly been bankrupted.

Ms Lowrey thinks American red tape owes a lot to historical racism. Starting with the pensions paid to civil-war veterans, she describes how white people suspected black people of trying to bilk the public purse, and demanded onerous checks to prevent fraud. This is part of the story, but a more basic problem is that America is the longest-surviving democratic system in the world. Whereas revolutions have torched old rules in other places, America has been steadily accumulating them for 250 years, like an ageing hoarder whose home is packed to the ceiling with vintage junk.

The health-care system, for example, is multiple systems piled on top of each other. A tax break for employer-provided health insurance dates back to 1943 (when it was a way for firms to dodge wartime wage controls by offering perks). Medicare (a straightforward but ruinously expensive programme for the old) and Medicaid (56 insanely complicated programmes for the hard-up) began in 1965. Obamacare, an attempt to cover the millions who slipped through the net, was passed in 2010 and sabotaged by Mr Trump in 2017.

Today Americans who lose their jobs often lose their insurance. To get Medicaid, they must complete forms that "contain impossible-to-parse instructions, request absurd amounts of data...and devolve into Proustian and at times terrifying digressions". One woman describes to Ms

Lowrey what it is like trying to navigate this maze when you have lost your job and insurance because of a brain injury. ("Freaking horrible.")

Each time-wasting rule has a lobby to defend it, so efforts to cut the time tax have disappointed. Elon Musk's DOGE did not try. Joe Biden did, shaving 35m hours from the time gobbled up by welfare paperwork in 2023. However, the overall burden of red tape grew by nearly 50 times as much, reaching a record total of four and a half working days per year, per American.

For inspiration, Ms Lowrey visits a country that was able to start from scratch. Estonia escaped from both communism and Soviet colonialism in 1991. The old order was swept away, and many of its enforcers went back to Russia. This allowed a team of young technocrats to create the most joined-up, user-friendly digital government on Earth. For most Estonians, "it takes less time to file a tax return than…to microwave a bag of popcorn."

In America, by contrast, the tax code is so confusing that most taxpayers have to pay for professional help to file their returns. This is absurd. Most people's financial affairs are so simple—a salary and some bank interest that the government already knows about—that an Estonian-style platform could save them money and time. Mr Biden launched a pilot scheme to simplify tax-filing that proved popular with users but terrified lobbyists for the tax-prep industry. Mr Trump killed it. ■

BACK STORY

Grief, gunmen and October 7th on screen

Can "Fauda", a TV thriller, capture the truth of Israel and Gaza?

ART CAN make sense of suffering, metabolising it into meaning, even entertainment. But it usually takes longer than this. Less than three years after October 7th 2023, "Fauda", a hit Israeli spy show, has dramatised that day's atrocities and their emotional fallout. Its new series illustrates the role of stories in coping with anguish; it also suggests the kinds of truths that fiction can impart—sometimes more powerfully than the news—and those it can't.

Since 2015 "Fauda" has followed a group of Israeli commandos who venture undercover into Gaza and the West Bank. Doron, the main character, is played by Lior Raz (pictured), one of the show's creators and a real-life veteran of a similar unit; he seems to carry Israel's burdens on his tense, manly shoulders. Whenever he thinks he's out, he is dragged back into a mayhem of abductions, bombings, betrayals, rogue fighters, manhunts and dusty shoot-outs.

In its first four seasons, "Fauda" made an effort to be fair. The Palestinian characters, like the Israelis, had griefs and grievances, families and team frictions. The plot only works because they look alike, too: the Israeli agents are mostly played by *mizrahi* Jews of Middle Eastern descent. *Fauda*, which means "chaos", is a codeword used when a mission goes awry, but it seemed a forlorn judgment on the whole intractable conflict.

The fifth season is different. Two years after October 7th, a pair of bereaved fathers pursue a freelance vendetta against terrorists sheltering in Marseille. Before long Doron must go undercover again, this time in a training camp in Syria. Now, though, his adversaries are less nuanced. "We're not human beings to you," complains a Palestinian—who is swiftly outed as a

monster. The Europeans who sympathise with his cause are drawn with equal scorn.

Is this narrowing of empathy a storytelling failure, vindicating critics who see "Fauda" as Zionist propaganda? No, because this series is not about the rights and wrongs (or wrongs and wrongs) of the overarching struggle, any more than, say, "All Quiet on the Western Front" adjudicates the causes of the first world war. Instead it is a portrait of trauma.

Two episodes rewind to the carnage of October 7th, in which Doron, his comrades and their families are caught up. They are hard to watch; after only three years, some overseas viewers may feel queasy about watching a re-enactment at all. By comparison, "United 93", a film about a hijacking on September 11th 2001, came out after five years, which some Americans felt was too soon. In Israel, though, where the series was released in May, the scenes it recreates—of pitiless gunmen and the horror in a besieged safe room—are inescapably familiar.

The haste is the point. This is drama as witness—and a stage of grief. Superficially, the plot offers a sort of therapeutic consolation, in which Doron and the gang fend off another mega-threat to Israel. But the major keys are rage and guilt. For all their bravery, the heroes fail to rescue one of their number's wife and children. Afterwards they are haunted and bereft. "I have no life," the widowed man says. "My mind is all black."

Rumbling through the dialogue is the wider failure of the state. "An entire country didn't see [the danger]," an Israeli spy chief accepts, taking responsibility in a way some actual bigwigs have avoided. Guilt is "in the air we breathe". The creators of "Fauda" couldn't foresee it either: in the past they considered a plotline about terrorists seizing a kibbutz, but deemed it unrealistic.

"Fauda" doesn't depict the awful war in Gaza. But if you want to understand how many Israelis have hardened their hearts to Gaza's torment, it can help. Its popularity suggests it is doing that, notably in the Arab world: the show is top of Netflix's chart in Lebanon and rating highly in Jordan, Qatar and other Arab countries. Books, films and TV often reach people who skip the news (or distrust it); soulful hunks and tough women with great hair are more compelling than dry reports and political speeches. Still, the contrast between the forceful public diplomacy of "Fauda" and Israel's flailing official kind is stark.

TV shows are not encyclopedia entries. A high-octane thriller is unlikely to convey all sides of a tortuous history even if it tries, which this one doesn't. To fully grasp the entwined agonies of Israel and the Palestinians, turn to other sources and voices, including those more critical of Israeli abuses and sympathetic to Palestinian pain. "Fauda" isn't the whole truth. But it captures part of it.

The Economist reads

Prints charming

A selection of the best new novels to read now

"I HAVE ONLY ever read one book in my life, and that is 'White Fang'. It's so frightfully good I've never bothered to read another." So says a character in Nancy Mitford's novel "The Pursuit of Love". Jack London's "White Fang", about a Canadian wolfdog, may be frightfully good, but no book is so satisfying that it should make you give up on reading. Here are eight excellent new titles. Read one, then pick up another.

Contrapposto. *By Dave Eggers.*
In this engrossing novel, Cricket Dibb grows up and pursues his ambition to become an artist. Along the way, he falls in love with the flighty and worldly Olympia, who becomes a forceful presence throughout his life. Rich characterisation and deft storytelling underpin this tale about chasing dreams, creating art and remaining true to your beliefs.

Cool Machine. *By Colson Whitehead.*
The final volume of the acclaimed Harlem trilogy continues the misadventures of Ray Carney, a furniture salesman and part-time fence, in the 1980s. The captivating anti-hero fraternises with top gangsters, low-level hustlers and Pepper, his ageing best friend, while grappling with personal trials and social turmoil. This terrific crime novel is also a love letter to New York.

The Disappearers. *By Marlon James.*
One night in Kingston in 1988, during a rehearsal for a play, eight gay men are brutally assaulted by a mob. A member of the cast is killed. Later, two of the survivors go in search of the "disappearers" who vanished after the attack. Spanning decades and encompassing a range of voices and narrative forms, this bold, electrifying book chronicles trauma, homophobia and marginalised lives.

Exit Party. *By Emily St John Mandel.*
At a house party in Los Angeles in 2031, one guest tries to make sense of bizarre doubles and disappearances. So begins a mind-bending piece of speculative fiction. Besides telling a thrilling and inventive story about parallel worlds and dual timelines, this surefooted novel explores threats to survival and the insidious spread of surveillance.

The Newer World. *By Sebastian Barry.*
Tennyson Bouguereau, a former slave, tells his remarkable life story in this beautifully wrought novel. Born into bondage with his twin sister ("We were nothing people"), he adjusts to freedom after the civil war. But when he later joins the army and is tasked with hunting down Native Americans, he is propelled into a world of carnage.

Ply. *By Hernan Diaz.*
Set in a post-apocalyptic American city, this novel's unnamed protagonist is a "pincher" who steals electricity to use as currency. Her talent arouses the interest of a mysterious inventor who approaches her to help with an experiment that has the potential to "alter the fabric of reality" and create a brave new society. A stimulating novel full of big ideas but also human struggles amid chaos and uncertainty.

Stations. *By Louise Kennedy.*
Two disillusioned teenagers meet in Ireland in 1982 and form an intimate bond. Red is eventually forced to flee the country for London. A few years later, Róisín attempts to make a new life for herself in the city. She looks to her old friend for support, only to find him veering out of control. An astute, emotionally charged novel that examines the lasting effects of first love.

Switzy. *By Emma Cline.*
David, a retired businessman, is making a one-way trip. His memories are fading and everyday life is becoming increasingly difficult. Aware that he is "both here and not here", he has settled on a final destination: a euthanasia clinic in Zurich. Unfolding in fragmentary prose, this novel is disorientating, thought-provoking and, as David approaches his journey's end, deeply moving. ■

A Hollywood insider's memoir

Rage and other four-letter words

Roll the Calls. By Ari Emanuel.
Knopf; 432 pages; $35. William Collins; £25

YOUR REVIEWER, who lives in Los Angeles, starts this task with fear in his gutless gut. Ari Emanuel, whose rise from mailroom clerk to talent agent to F-bombing Hollywood tycoon is vigorously chronicled in "Roll the Calls", a new ghostwritten autobiography, is not someone you upset lightly in this town.

After all, Mr Emanuel is the guy who once told Harvey Weinstein that he would "rip his fucking head off his neckless neck" after the former producer tried to broker the sale of his firm. When Michael Ovitz, his boss at Creative Artists Agency, a talent agency, warned of reprisals after Mr Emanuel said he was joining another firm, he reacted by hoisting an office chair above his head. "If you're threatening me...I'm going to destroy this motherfucking office."

In this book rage is the defining four-letter word, bar one. ("Rage" occurs 14 times in the first two pages.) It is a reminder of a time, long before big tech drowned Tinseltown in data, when Hollywood was a place of towering egos who called the shots and "rolled the calls"—that is, yelled at each other on the phone at all hours to cut deals and cut each other to shreds. Ari Gold, a talent agent in "Entourage", a TV series from the early 2000s, was modelled on Mr Emanuel and is equally prone to losing his cool. As Mr Emanuel quips: "I put the rage in 'Entourage'."

Often Mr Emanuel is a flat-out bully. When Trident, a chewing-gum manufacturer, cancels his favourite flavour, he calls its boss, ordering someone to row out a phone to him on a lake in Wisconsin where he is fishing. "Where do you fucking get off cancelling the only good flavour your shitty fucking company makes!" he screams. The stunned CEO ends up shipping Mr Emanuel the last few cartons.

So far, so red-blooded Hollywood. Yet the script goes awry. Mr Emanuel wields his anger and ambition like a jackhammer in his pursuit of an ever-bigger business empire. Success fails to make him happy. As he would put it: "Life. Fucking. Lesson."

He claims the relentless deal-making to build William Morris Endeavour (WME), his media conglomerate, valued at $13bn in 2025, was all in service of its clients. Maybe. But the most telling descriptions reveal more about his scorched-earth tactics than about Hollywood's glitterati. He phones Larry David so often to persuade him to become a client that the comedian finally surrenders to get some peace and quiet. When Oprah Winfrey, at a crossroads in her career, opens up to him about her self-doubt, he retorts: "Don't you know who you are, Oprah? You're Oprah Fucking Winfrey. No, really, have you looked in a mirror lately?" After he sends a full-length mirror as a gift, she signs on to WME.

Bizarrely, he shares almost no insights on the upheaval in Hollywood during his career. Netflix does not get a mention. The word "internet" comes up once. The main gossip is about his own deal-making which, fittingly, is mostly pugilistic. In 2016 WME led a deal to acquire Ultimate Fighting Championship, a martial-arts version of fight club, for $4bn. That deal was "the Ari-est thing ever," he writes. "Like Michael Phelps buying a pool."

Yet as his wealth and power increase, so does his self-pity. As is typical for Hollywood, there is a therapist in the background. "Dr Calm" tries to explain to his client that his urge to conquer Hollywood is driven by an "Ego Project" caused by demons in his past. Yet Mr Emanuel cannot bury them. His unresolved childhood issues with his mother, a tough-talking Chicago civil-rights activist, haunt him throughout the book. So does his struggle with dyslexia. He barely disguises the lifetime of resentment he feels towards his also-famous brothers, Rahm and Zeke.

There must be a lot that is likeable about Mr Emanuel, because some friends and clients stick by him. It's hard to know why. He dismisses Patrick Whitesell, his lifelong business partner, for no apparent reason. Like other close colleagues, "Patrick no longer exists for me," he writes. "Dead. Guarded by Cerberus." His long-suffering first wife, Sarah, whom he seduced with a barrage of phone calls, is no more fleshed out than the fictional "Mrs Ari" in "Entourage". Once they split, she drops out of the story altogether.

Then comes the fairy-tale ending. A younger woman, Sarah Staudinger, a fashion designer known as Staud, comes into Mr Emanuel's life, after phone calls persistent enough to give most people PTSD. On her 29th birthday, he woos her with 29 dozen roses. Sure, during their courtship, he convinces his therapist to dump her on his behalf. ("Get me out of this contract.") Then they make up and get married.

Hollywood cliché? You bet. But it's a different type of Hollywood now. Agents are less like power brokers and more like business managers. Their client lists have extended from stars to creators, many of whom build up big fan bases before they even seek representation. There is less tolerance for Hollywood's raging bulls, let alone its bullies. ■

World in a dish

Something to chew on

CAPE TOWN

Biltong is going global—like South Africans

"IT ALL STARTED in 1652," explains Greg White, as he smooths the creases from his apron. The meat connoisseur could be talking about South Africa. The country's modern history began that year, when Jan van Riebeeck of the Dutch East India Company settled in what would become Cape Town. But he is referring to biltong, a quintessentially South African cured meat. On September 24th, Heritage Day, South Africans will munch on the savoury snack as they celebrate their country's cultures.

Today biltong is a "massive industry", says Wandile Sihlobo, an agricultural economist. Beef is the standard meat, but there are versions using ostrich, springbok, wildebeest and kudu. The chewy shards and cheaper "snap sticks" are sold at petrol stations, township butchers and rugby stadiums. Wineries offer biltong pairings. Teething babies are given biltong to soothe gums. "Other than Trevor Noah," says Anna Trapido, a food writer, "it's the one thing all South Africans agree on."

And, like the South African-born comedian, biltong is becoming famous worldwide. A growing diaspora and hunger for protein are driving demand. New brands are popping up everywhere from Berlin and Brooklyn to Hong Kong and Singapore. Firms are trying new flavours like peri-peri and plant-based versions (mushroom is a common vegan substitute).

It is the familiar story of a modern twist on an old foodstuff. When the Dutch arrived in the Cape they found indigenous people preserving game with salt and drying it in the open air. The newcomers added vinegar and spices from their Asian trade routes—cloves, black pepper and coriander seeds. Biltong, a fusion of *bil* (buttock, a reference to the cut) and *tong* (tongue or strip), was born. In the 19th century Boers, as those of mainly Dutch heritage were then known, left the British-run Cape for the hinterland. Their story and that of biltong became entwined when they took it on the "Great Trek".

Though biltong is often seen as a "white" snack, dried meat transcends race. There are many variants of biltong in black cuisine (it is called *umqwayiba* in isiZulu). Some Ndebele people use dried apricots in their version. Vendas brush the meat with marula oil. Dried meat is widely added to stews to give them an umami flavour.

Biltong aficionados emphasise that it is not the same thing as jerky. "We don't use that word in this house," says Lindie White, Greg's wife and co-host of a make-your-own-biltong session your correspondent recently joined. The American product is often drenched in sugar. Jerky is also the snack of an impatient nation: it is subjected to a massive hair dryer to speed dehydration. Biltong, by contrast, reflects the idea of "Africa time" that can frustrate visitors to the continent; it is air-dried and, local butchers explain, will be ready "now-now" (ie, later). It is well worth the wait. ■

Economic & financial indicators

	Gross domestic product % change on year ago latest		quarter*	2026†	Consumer prices % change on year ago latest		2026†	Unemployment rate %		Current-account balance % of GDP, 2026†	Budget balance % of GDP, 2026†	Interest rates 10-yr gov't bonds latest, %	change on year ago, bp	Currency units per $ Sep 24th	% change on year ago
United States	2.1	Q2	1.5	2.1	3.4	Aug	3.2	4.1	Aug	-3.5	-6.5	5.1	99	-	
China	4.3	Q2	3.6	4.7	0.8	Aug	0.9	5.3	Aug‡§	4.2	-5.4	1.4 §§	-22	6.71	6.0
Japan	0.9	Q2	1.4	0.8	1.9	Aug	1.8	2.4	Jul	4.0	-1.8	3.0	137	158	-6.7
Britain	1.2	Q2	1.7	1.2	3.1	Aug	3.3	4.9	Jun††	-3.7	-5.2	5.2	43	0.76	-2.6
Canada	1.1	Q2	3.3	0.9	3.0	Aug	2.8	6.4	Aug	-0.3	-2.1	4.0	76	1.41	-2.1
Euro area	1.2	Q2	2.6	0.8	3.2	Aug	2.8	6.4	Jul	2.3	-3.4	3.6	82	0.88	-3.4
Austria	0.4	Q2	-0.6‡	0.4	2.9	Aug	3.1	6.2	Jul	1.2	-4.1	3.7	69	0.88	-3.4
Belgium	0.5	Q2	0.1	0.7	4.2	Aug	3.4	6.0	Jul	-2.1	-5.2	4.2	84	0.88	-3.4
France	0.5	Q2	0.1	0.6	2.6	Aug	2.4	8.3	Jul	-0.4	-5.3	4.7	112	0.88	-3.4
Germany	1.0	Q2	1.3	1.0	2.9	Aug	2.7	4.0	Jul	4.5	-4.2	3.6	82	0.88	-3.4
Greece	1.8	Q2	1.4	2.0	3.7	Aug	3.8	7.9	Jul	-5.6	0.6	4.4	93	0.88	-3.4
Italy	1.0	Q2	0.7	0.9	3.2	Aug	2.7	5.8	Jul	0.7	-3.0	4.5	95	0.88	-3.4
Netherlands	1.6	Q2	2.6	1.3	2.8	Aug	2.9	4.0	Aug	8.3	-3.0	3.6	73	0.88	-3.4
Spain	2.7	Q2	2.8	2.6	4.6	Aug	3.3	10.0	Jul	2.4	-2.5	3.9	69	0.88	-3.4
Czech Republic	1.9	Q2	1.4	2.0	1.9	Aug	2.0	3.0	Q2‡	0.1	-2.8	5.3	82	21.4	-4.3
Denmark	4.7	Q2	1.1	3.3	2.1	Aug	2.0	3.1	Jul	12.1	1.3	3.3	71	6.57	-3.8
Norway	2.0	Q2	2.7	1.5	3.3	Aug	3.0	4.4	Jul‡‡	13.0	10.0	4.5	44	9.49	4.2
Poland	3.9	Q2	4.1	3.4	3.4	Aug	3.0	5.8	Aug§	-2.0	-7.0	6.3	80	3.84	-6.2
Russia	1.3	Q2	8.3	0.7	6.3	Aug	6.1	2.3	Jul§	2.3	-3.2	16.6	208	84.4	-1.2
Sweden	3.2	Q2	6.4	2.1	0.3	Aug	1.9	8.5	Aug§	4.8	-2.0	3.1	47	9.92	-6.0
Switzerland	2.8	Q2	7.8	1.7	0.8	Aug	0.6	3.1	Aug	8.2	0.2	0.6	37	0.83	-3.6
Turkey	2.3	Q2	4.6	2.7	31.5	Aug	31.0	8.3	Jul§	-2.4	-3.5	32.5	306	48.8	-15.2
Australia	2.1	Q2	1.7	1.6	3.5	Jul	3.7	4.6	Aug	-3.7	-1.5	5.3	112	1.42	7.0
Hong Kong	4.3	Q2	-2.5	4.1	1.7	Aug	2.0	3.8	Aug‡‡	7.8	-2.5	3.9	74	7.84	-0.9
India	7.8	Q2	6.8	7.2	4.8	Aug	4.6	6.1	Aug	-1.5	-4.3	7.0	57	95.7	-7.2
Indonesia	5.3	Q2	4.4	5.3	3.2	Aug	3.4	4.7	Feb§	-2.1	-2.9	7.0	68	17,881	-6.9
Malaysia	6.0	Q2	9.3	5.5	1.9	Aug	1.9	3.0	Jul§	3.1	-3.5	3.9	49	4.08	2.9
Pakistan	4.8	2026**	na	3.0	11.2	Aug	9.0	6.9	2025	-1.1	-4.7	12.4 †††	46	278	1.4
Philippines	2.3	Q2	2.4	2.9	6.1	Aug	5.6	6.0	Q3§	-4.6	-6.4	7.5	155	62.8	-8.9
Singapore	5.9	Q2	5.7	5.4	2.3	Aug	2.0	1.9	Q2	15.6	1.3	2.4	59	1.28	nil
South Korea	3.8	Q2	2.6	3.5	3.1	Aug	2.7	2.0	Aug§	13.6	-0.6	4.4	160	1,366	2.1
Taiwan	12.9	Q2	5.7	12.0	2.0	Aug	2.0	3.3	Aug	25.2	1.6	1.9	54	31.8	-4.7
Thailand	1.9	Q2	-0.7	2.1	2.5	Aug	1.9	1.2	Aug§	-0.3	-5.5	2.2	87	33.4	-4.7
Argentina	2.0	Q2	-2.3	2.3	33.5	Aug	32.5	7.9	Q2§	-0.1	0.1	na	na	1,516	-9.8
Brazil	2.0	Q2	1.9	2.0	4.2	Aug	4.4	5.3	Jul§‡‡	-2.6	-7.3	14.2	56	5.17	2.1
Chile	-0.2	Q2	-0.1	0.4	4.1	Aug	3.8	9.5	Jul§‡‡	-1.1	-1.8	6.0	37	963	-1.5
Colombia	3.4	Q2	5.2	2.5	6.2	Aug	5.7	8.1	Jul§	-2.1	-6.6	12.7	156	3,264	17.8
Mexico	2.1	Q2	5.8	1.3	3.3	Aug	3.8	2.7	Jul	-0.4	-4.0	9.3	59	17.5	4.7
Peru	2.6	Q2	-1.0	2.8	4.4	Aug	3.9	4.9	Aug§	2.2	-2.1	6.5	63	3.36	4.2
Egypt	5.0	Q1	4.0	4.6	14.5	Aug	13.7	5.8	Q2§	-5.1	-5.1	25.6	50	51.4	-6.4
Israel	7.0	Q2	14.9	4.3	1.5	Aug	1.9	2.8	Aug	1.0	-3.3	4.0	-21	3.04	10.2
Saudi Arabia	-4.7	Q2	-17.9	-4.8	1.8	Aug	1.9	3.1	Q1	-3.8	-7.2	na	na	3.76	nil
South Africa	0.9	Q2	-1.0	1.5	4.2	Aug	3.9	33.6	Q2§	-0.2	-4.4	8.9	-21	16.4	5.4

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 Sep 23rd	% change on: one week	Dec 31st 2025
United States S&P 500	7,706.0	2.0	12.6
United States NAS Comp	26,936.0	3.7	15.9
China Shanghai Comp	3,936.5	1.2	-0.8
China Shenzhen Comp	2,525.9	2.0	-0.2
Japan Nikkei 225	65,019.0	1.7	29.2
Japan Topix	4,091.1	0.7	20.0
Britain FTSE 100	10,705.3	0.2	7.8
Canada S&P TSX	35,751.4	0.7	12.7
Euro area EURO STOXX 50	6,299.8	0.5	8.8
France CAC 40	8,123.4	-0.2	-0.3
Germany DAX*	25,410.6	-0.5	3.8
Italy FTSE/MIB	51,987.5	nil	15.7
Netherlands AEX	1,107.9	1.1	16.5
Spain IBEX 35	19,632.2	nil	13.4
Poland WIG	157,468.3	2.5	34.3
Russia RTS, $ terms	863.1	0.9	-22.1
Switzerland SMI	13,921.7	0.4	4.9
Turkey BIST	13,251.9	1.0	17.7
Australia All Ord.	8,956.2	0.9	-0.7
Hong Kong Hang Seng	24,834.1	0.5	-3.1
India BSE	74,828.3	0.7	-12.2
Indonesia IDX	6,374.9	-1.0	-26.3
Malaysia KLSE	1,676.4	-0.2	-0.2

	Index Sep 23rd	% change on: one week	Dec 31st 2025
Pakistan KSE	172,232.5	2.5	-1.0
Singapore STI	5,709.9	1.3	22.9
South Korea KOSPI	7,080.9	5.4	68.0
Taiwan TWI	48,157.3	5.0	66.3
Thailand SET	1,610.7	3.1	27.9
Argentina MERV	2,969,545.0	-2.0	-2.7
Brazil BVSP*	185,814.1	0.1	15.3
Mexico IPC	64,276.7	1.2	nil
Egypt EGX 30	54,224.9	-1.1	29.6
Israel TA-125	4,158.2	0.8	13.5
Saudi Arabia Tadawul	10,680.6	-0.9	1.8
South Africa JSE AS	111,564.6	-1.7	-3.7
World, dev'd MSCI	4,939.2	1.3	11.5
Emerging markets MSCI	1,748.6	3.7	24.5

US corporate bonds, spread over Treasuries

Basis points	latest	Dec 31st 2025
Investment grade	89	93
High-yield	312	354

Sources: LSEG Workspace; Moscow Exchange; Standard & Poor's Global Fixed Income Research *Total return index

Commodities

The Economist **commodity-price index 2020=100**	Sep 15th	Sep 22nd*	% change on month	year
Dollar Index				
All items	154.3	153.8	-0.9	13.3
Food	156.0	152.1	-1.8	4.8
Industrials				
All	152.8	155.3	-0.1	21.3
Non-food agriculturals	154.8	150.4	-2.7	19.7
Metals	152.3	156.5	0.5	21.8
Sterling Index				
All items	147.0	148.1	1.2	14.8
Euro Index				
All items	152.7	153.6	1.1	16.8
Gold				
$ per oz	4,284.7	4,336.3	-6.4	14.7
Brent				
$ per barrel	108.8	99.4	12.3	47.0

Sources: CME Group; LME; LSEG Workspace; NOREXECO; NZ Wool Services; S&P Global Commodity Insights; Thompson Lloyd & Ewart; USDA *Provisional

For historical indicators data, visit economist.com/economic-and-financial-indicators

OBITUARY
Bob Mackie

Hollywood's boldest costumier died on September 14th, aged 87

Everyone remembered the dress. It was a floor-length crystal-beaded sheath, slinky and tight as fish-scales, fitting perfectly to every curve of the body of Marilyn Monroe. It was in this that she stood, sparkling in the spotlights, in Madison Square Garden in 1962 to sing "Happy Birthday, Mr President" to John F. Kennedy on his 45th. Her voice was light and shy. Not many in the audience were attending to her voice.

The dress had been made by someone else, but the original thought, and the sketch on paper, had come from Bob Mackie. He was in his first job in Hollywood, as a costume designer to the stars. Already, though, he knew what he wanted. His clothes had to proclaim the personality of the wearer, or of the character they played, as loudly as possible. It didn't matter *what* it was for, but *who* and *why*. If there was a sinuous shape, accentuate it. If there was lovely smooth skin, show it. Scatter the sparkles everywhere. His motto was "Dare to be noticed".

Plenty of stars, almost all of them women, did dare to wear a "Mackie", and their costumes too stayed in the mind. There was the "naked illusion dress", sheer net with a scattering of silver sequins and white feathers at forearms and fetlocks, worn by Cher to a Met Gala in 1974. Four years later came the flame dress, a wild, sparse, bugle-beaded number that licked all round her body. For Tina Turner, after her split with Ike, he designed a silver-and-gold chain-fringed body suit with pleated gold-lamé escape-wings.

Glitter was his touchstone. For Diana Ross he made a coruscating robe in shocking sapphire blue. Zendaya he fitted with a halter-neck gold gown from his archive, all-but-naked to below the navel, criss-crossed with rhinestones and white bugle beads. He dressed Elton John in a sequined baseball uniform to sing in Dodger Stadium, and as a giant sequined Donald Duck. People said he seldom met a sequin, bead or rhinestone he didn't like. True. He thought always of the lights and the person who would perform in their glare, shimmering, marvellous.

He and Cher had a particular rapport, starting when at some point in the late 1960s her dress fell apart on "The Carol Burnett Show" and he managed to fix it. He had a similar random but propitious meeting with Judy Garland, who blundered into his office bursting, looking for the ladies' room; but she was "a big handful" to work with, whereas Cher was the cutest thing ever. She was a perfect size six, with a beautiful long-waisted torso and a tummy so flat that it would have been criminal to hide it. Even more important, she had the boldness and wit to carry off, even magnify, his creations. As a prize-presenter at the Oscars in 1986 she did not hesitate to wear—as a rebuke to the Academy for overlooking her role in "Mask"—a black-lattice two-piece, more gaps than lattice, and a huge black-feather mohawk headdress. This bothered even him, because it pulled all the focus from the winner. She didn't care; she had fun.

Fun was the name of the game with these crazy-ass clothes. (His own were preppy and plain, unless he was in a tux.) He once dressed Carol Burnett as "Starlet O'Hara", a hard-up actress descending a staircase in the famous scene from "Gone With the Wind", in a billowing velvet dress made of curtains with the curtain-rod still attached. That probably earned him his biggest laugh. But working on her comedy-variety TV show, from 1967 to 1978, was also truly hard work. He dressed everybody, the guest stars, the singers, the dancers, even up to their wigs. Each costume had to sit perfectly on the body, so that if the women dancers twirled or kicked up their legs their bodices would stay put; but he had to create 60 outfits a week, each so intricately structured that artistes could scramble from one to the next in under a minute.

That was the donkey-work he hadn't entirely anticipated when, as a 12-year-old, he had fallen in love with the film version of "An American in Paris" and decided that he, too, wanted to make costumes as beautiful as those. That was when he started sketching his own ideas and decorating his bedroom with cut-out figures in shiny paper clothes. Weekly outings to the cinema with his mother and half-sister were the high point of a lonely childhood dominated by his stern grandmother, who brought him up. Hollywood looked like heaven compared.

Fashion itself, though, was never his thing. Simply making clothes for people to wear seemed heartless, as well as boring. In the 1980s, as his Emmys were accumulating and with three Oscar nominations in the bag (two with his lifelong partner, Ray Aghayan), he ventured into ready-to-wear, later adding luggage and home furnishings. It didn't fulfil him. The fashion mavens of Seventh Avenue couldn't take him seriously: to them he was "Barnum Bob" or "The Rajah of Rhinestones". They couldn't understand that his bespoke costumes for the stars were haute couture, hand-sewn and hand-decorated works of art. Even his line of collectible Barbie dolls wore hand-sewn clothes, and the gown of Barbie as "Goddess of the Sun" glittered with 11,000 sequins.

He never went out of fashion himself, though he was in the costume business for six decades. His outfits kept returning. Beyoncé wore a re-creation of the flame dress to the Kennedy Centre Honours in 2005, and Kim Kardashian played regularly with the naked-illusion look. But the robe that stars most longed to wear was Marilyn Monroe's. Madonna and Sabrina Carpenter both wore versions of it by him; but Ms Kardashian borrowed the dress itself for the Met Gala in 2022.

That went much too far. For him, no one else could, or should, ever be seen in that dress. He was unimpressed that Ms Kardashian had dieted like a maniac to get into it. Of course she had. It was drawn for Marilyn, a goddess; she, and her exact body, had been in his mind as he designed it. To see it was to catch, in its lights, the emotion of her presence. That was what a true costumier did. ■

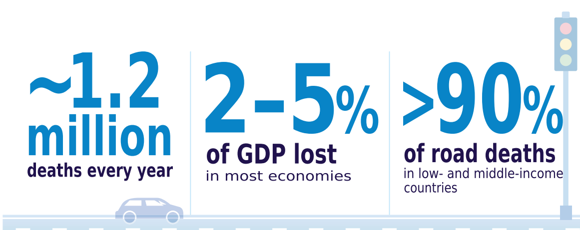
The Silent Pandemic on Our Roads

Every year, approximately 1.2 million people die on the world's roads. Another 50 million people suffer injuries in road crashes, often with lifelong consequences. This is equivalent to the population of Spain or South Korea. They are the leading cause of death for people aged 5 to 29 globally.

Yet despite the scale of the toll, road deaths rarely generate the sense of urgency that accompanies other major public health disasters. They happen one at a time, across millions of kilometers of roads and thousands of communities. The cumulative impact is enormous, but largely invisible.

"I call it the 'silent pandemic'," says Jean Todt, the United Nations Secretary-General's Special Envoy for Road Safety. "And the vaccines can be as simple as wearing a helmet or a seatbelt, slowing down, driving sober, and putting away the phone."

Individual measures are a critical part of the equation, but their effectiveness depends on the wider systems in which people travel. In many countries, roads are built without adequate protection for pedestrians and cyclists, vehicles and motorcycle helmets do not meet safety standards, traffic laws are poorly enforced, and emergency services struggle to provide timely care after a crash on congested streets.



In addition to the human cost, road crashes cost most economies 2-5% of GDP through lost productivity, healthcare expenses, and the long-term consequences of disability.

The problem is particularly serious in low- and middle-income countries, which account for more than 90% of road deaths. In some, crash fatality rates approach 40 per 100,000 people; nearly ten times the rate in many high-income countries.

"Too often, people grow up in conditions where education and enforcement are weak, and where the threat of road crashes becomes normal," says Mr. Todt. "This makes them highly vulnerable. But for change to happen, every sector must understand the urgency of this crisis."

High-income countries are not immune to the challenge. New forms of mobility are emerging rapidly, from e-scooters and e-bikes to increasingly automated and connected vehicles, while laws and regulations often fail to keep pace. Yet technology can also offer a powerful opportunity to make roads safer. "Vehicle automation is a shining hope," he adds. "It has the potential to prevent crashes and save lives, but only a small minority will have access to it in the near future."

The international community has set a clear goal for improving road safety. Under UN Sustainable Development Goal 3.6, Member States pledged to halve global road deaths and injuries by 2030. But Mr. Todt argues that global commitments have largely failed to translate into results.

"Setting goals is important, but implementation remains far too slow, and there is not enough interest in seriously addressing road crashes. We will not change this trajectory without much greater effort at every level. Governments have a primary responsibility, but the private sector also has a crucial role."

UN-JCDecaux #MakeASafetyStatement campaign

In his capacity as Special Envoy, Mr. Todt has advocated for stronger cross-sector engagement on road safety. In collaboration with the outdoor advertising company JCDecaux and a cadre of international celebrities, he launched the UN-JCDecaux Global Campaign for Road Safety to promote safe choices on the road in nearly 1,000 cities and 80 countries worldwide. The campaign takes a creative approach to reaching younger road users, using the influence of high-profile figures to build awareness of safe road user behaviour.

Mr. Todt also helped launch the United Nations Road Safety Fund, the UN's only pooled funding mechanism dedicated to road safety. Established in 2018, the Fund supports projects where the need is greatest, helping governments improve infrastructure, data collection, and post-crash care.

The Fund's supported projects across nearly 100 countries illustrate the possibilities of multilateral investment to reduce road crash deaths and injuries.

"We know what works," says Mr. Todt. "Governments must bring the solutions to more people, and every road user must contribute through safer behaviour. Safe mobility is a responsibility we should all share. We owe it to the families behind those 1.2 million deaths and 50 million injuries every year to keep pushing for change."

United Nations

Special Envoy for Road Safety