The Economist

Trump and nuclear deterrence

Latin America's right-wingers

Why India's elite loves Modi

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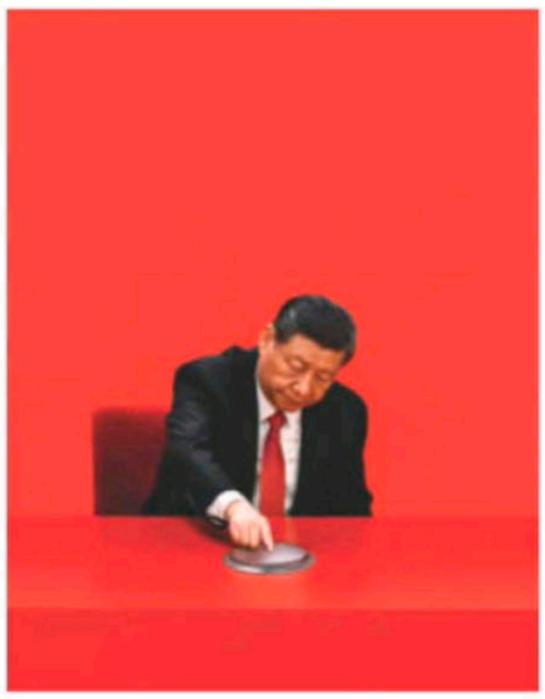

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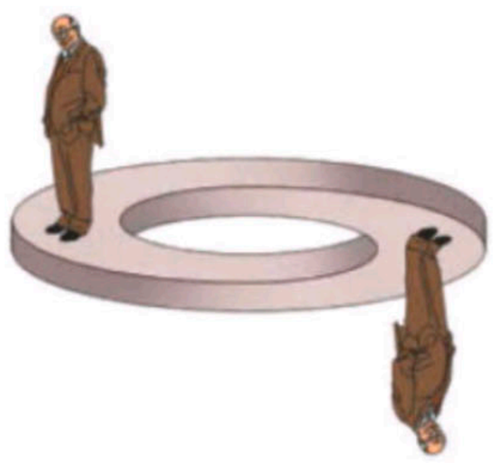

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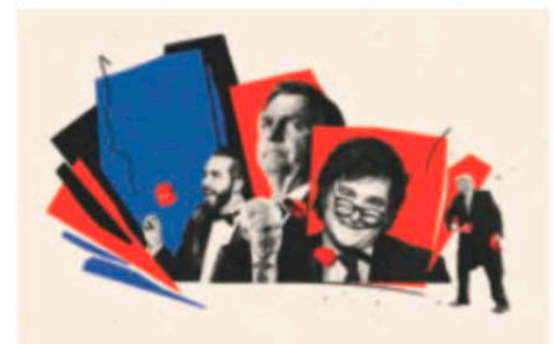

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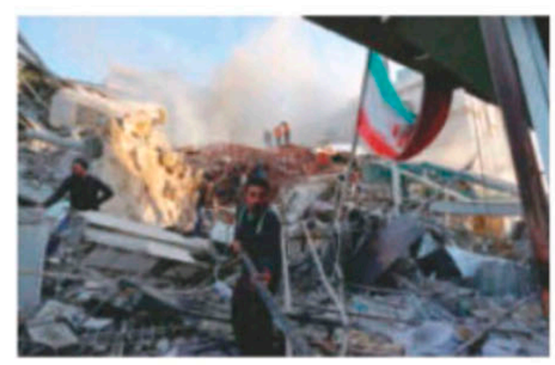

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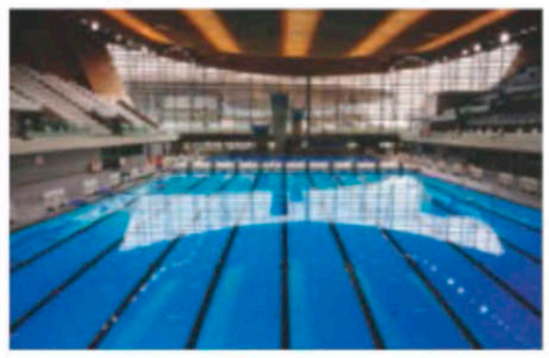

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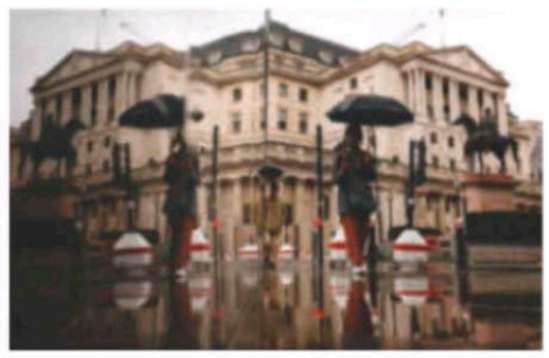

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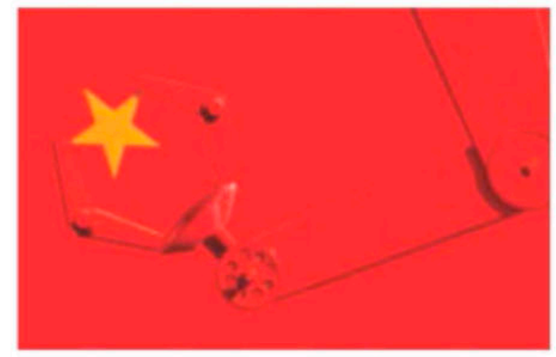

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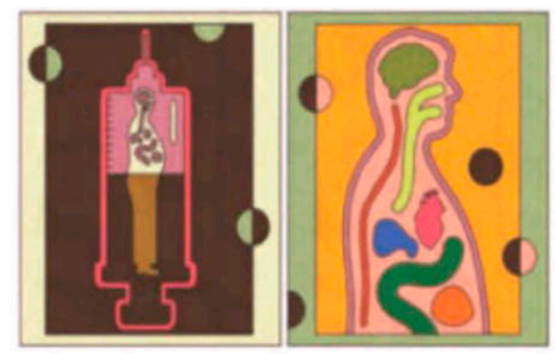

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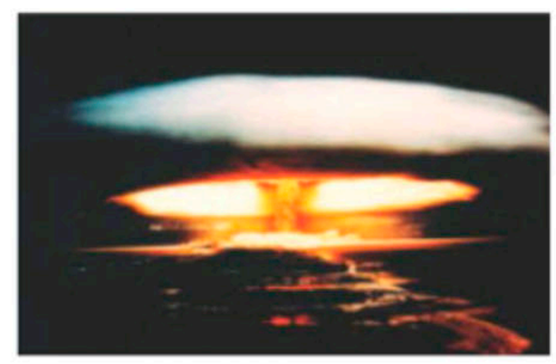

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to take part in *"a severe contest between intelligence, which presses forward, and an unworthy, timid ignorance obstructing our progress."*

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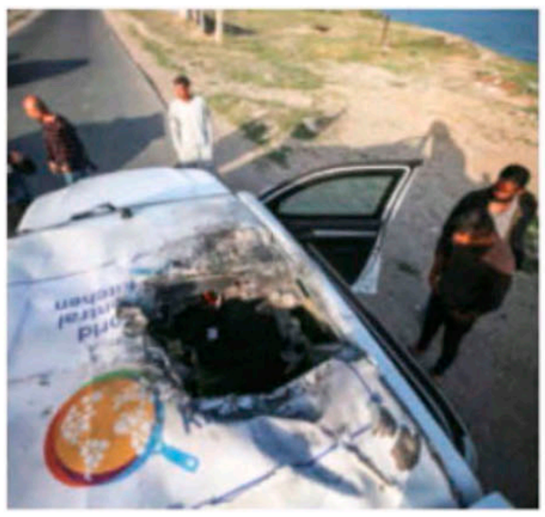
The world this week Politics



An **Israeli** strike killed seven aid workers in **Gaza**. A drone fired missiles at the car convoy of World Central Kitchen, a charity that has worked closely with Israel in recent months. Its route had been cleared with the Israeli army. Six of the seven were foreign aid-workers, thought to be the first to die in the Gaza war (around 200 aid workers have been killed). Their deaths provoked a furious international response. Joe Biden said that Israel "has not done enough to protect aid workers". Binyamin Netanyahu acknowledged the "tragic event" in Gaza but said "this happens in war." WCK said it was pausing its operations in Gaza, as have other NGOs.

In Syria a suspected Israeli air strike hit the **Iranian** embassy compound in Damascus. Seven people were killed, including General Mohammad Reza Zahedi, a commander of the Quds Force, the expeditionary wing of Iran's Revolutionary Guards. He was the highest-ranking Iranian commander to be assassinated since America killed Qassem Suleimani with a drone strike in January 2020.

Benny Gantz, a member of the **Israeli war cabinet**, called for an early election to be held in September to "renew trust" in the government. Earlier, tens of thousands of people marched in Jerusalem calling for the removal of Mr Netanyahu as prime minister.

Uganda's Constitutional Court upheld a law that imposes long prison sentences for "promoting homosexuality" and the death penalty for "aggravated homosexuality". It struck down some sections of the law, such as a duty to report gay people to the police.

Human-rights groups accused Russia's Wagner mercenaries of assisting government forces in drone strikes and attacks that have killed large numbers of civilians in **Mali**. The country's political parties and NGOs have called on the military government running the country to draw up a timetable for a return to democracy, after missing a deadline in 2022 and then breaching a promise to hand over to civilian rule by the end of March this year.

Rolexgate

Police raided the home of **Peru's** president, Dina Boluarte, in their search for evidence relating to the origin of her Rolex watches. Ms Boluarte is being investigated for allegedly enriching herself while in office. She denies wrongdoing and described the raid as "abusive". But six ministers abruptly resigned, throwing her government into crisis.

President **Joe Biden** and his Chinese counterpart, **Xi Jinping**, held what both sides described as a "candid and constructive" phone call. The leaders discussed areas of co-operation, such as counter-narcotics and climate change. But they disagreed on Taiwan and trade, among other things.

China stirred up tensions with **India** again by designating Chinese names to 30 places in the Indian state of Arunachal Pradesh, which lies in the foothills of the Himalayas. China claims the area is part of South Tibet. America said it opposed any attempt by China "to advance territorial claims" on the region.

Thailand's reformist Move Forward party came a step closer to being outlawed, after the Constitutional Court decided to hear a case that seeks to ban it. The court has already ruled that the party's policy of reforming the law to allow criticism of the monarchy is unconstitutional. Move Forward won a general election last year, but it was blocked from taking power by the royalist-army establishment.

Taiwan was hit by an earthquake of magnitude 7.4, the country's strongest in 25 years. Most of the damage was in Hualien county, on the east coast. At least nine people were killed and a thousand injured.

Less than a year after it lost heavily in a general election, **Turkey's** opposition came roaring back to life in local elections. The Republican People's Party (CHP), which is on the centre-left, received 38% of the total vote compared with 36% for the ruling Justice and Development (AK) party. The vote is seen as a rebuke to Recep Tayyip Erdogan for his handling of the economy. Since his re-election as president last May, annual inflation has soared to 68.5%.

Meanwhile, at least 29 people died in a fire at a nightclub in **Istanbul**. The casualties were mostly workers who were renovating the building during the day.

In Germany new laws that relax the use of **cannabis** came into force. People can carry up to 25 grams of the weed and grow three plants at home. But they can't smoke it near schools or in pedestrian zones.

Ukraine carried out a drone attack on an oil refinery in the Russian republic of Tatarstan, which also houses factories that produce drones for Russia to attack Ukraine. The target was around 1,300km (800 miles) inside Russian territory, the farthest strike that Ukraine has made across the border. Meanwhile a new law was signed in Ukraine that lowers the mobilisation age from 27 to 25, allowing the armed forces to expand the draft.

Mike Johnson, the speaker of America's House of Representatives, suggested that a vote on a bill that provides **military aid to Ukraine and Israel** would be held soon. The bill passed the Senate but has stalled in the House because of opposition from Republicans. Mr Johnson wants to tie his party's support for the aid to concessions from Democrats on things like lifting a moratorium on new liquefied natural-gas facilities, and hinted that some of the aid will be a loan.

Florida's Supreme Court ruled that a state ban on **abortion** six weeks after conception could come into force next month. But it also sent the matter to voters by approving a ballot measure for November's general election that would restore the right to an abortion up to 23-24 weeks into a pregnancy. The issue will resonate throughout the South. Women from Georgia, Texas and elsewhere have travelled to Florida for the procedure after their states banned it.

Big Brother is listening

Scotland's controversial hate-crime law came into effect, making it illegal to use "threatening or abusive" behaviour to stir up hatred against people on the basis of certain characteristics, such as being transgender. The law is opposed by many, including J.K. Rowling and Elon Musk, for curtailing free speech. The head of the Scottish Police Federation says it is unworkable because people won't understand it. Police Scotland was criticised for a bizarre "hate monster" awareness campaign. Within the first few days 4,000 complaints of hate were reportedly registered under the law online.

The world this week Business

Disney saw off an epic proxy challenge from Nelson Peltz at its annual general meeting. Through Trian, his hedge fund, Mr Peltz was seeking two seats on the company's board to "restore the magic", claiming that poor management and box-office failures have contributed to the under-performance of Disney's share price. But Bob Iger, the chief executive, fought an extensive campaign defending his turn-around strategy, which won the support of BlackRock, the Disney family and George Lucas, a film producer. Mr Peltz reportedly received just 31% of the vote for his claim to a seat.

Tesla delivered 386,810 vehicles worldwide in the first quarter of 2024, a decrease of 8.5% year on year and its first quarterly decline on that basis since 2020. Investors, already rattled by slowing growth in the electric-vehicle industry, punished Tesla's stock. Figures from other carmakers were mixed. Ford and Hyundai reported a big rise in EV sales in America, and General Motors announced a sharp decline.

Despite the fall in deliveries, Tesla reclaimed its crown as the world's biggest seller of EVs, after **BYD** sold just 300,000 pure-electric vehicles in the first quarter. That is far below the more than 526,000 that BYD shifted in the last three months of 2023, when it overtook Tesla in sales.

Xiaomi entered China's fiercely competitive EV market when it started selling its new SU7 four-door sedan, which has a lower-than-expected starting price of $30,000. The Chinese tech company is better known for its smartphones. It took nearly 90,000 orders for the car over 24 hours, though customers may have to wait up to seven months for a delivery.

A meeting of minds

America and Britain signed an accord to "build a common approach" on ensuring the **safety of artificial intelligence**, the first agreement of its kind in the world. Although America has far more AI start-ups, Britain is home to DeepMind, a developer of neural networks that is owned by Google. Britain opened its AI Safety Institute last November. America's parallel institute is still being organised.

Microsoft decided to sell its Teams chat application separately from its Office 365 suites around the world. It unbundled the products in Europe last year to avert an antitrust fine from the European Commission.

Sam Bankman-Fried insisted that "I never thought that what I was doing was illegal," after he was sentenced to 25 years in prison for fraud at FTX, a cryptocurrency exchange he founded that collapsed in 2022. The sentencing judge said that Mr Bankman-Fried had committed perjury during his testimony to the court, and shown no remorse for his actions.

SLB, the world's biggest provider of oilfield services, agreed to buy **Champion X**, which specialises in production chemicals and artificial lift solutions, such as jet pumps. It is the biggest acquisition by SLB, formerly known as Schlumberger, since 2016.

The price of **natural gas** in Europe fell, after it was reported that gas-storage in the EU was around 60% full, a record high for this time of year. That will rise in the coming warmer months as gas supplies are replenished. Two years ago Europe faced soaring gas prices amid Russia's invasion of Ukraine and low storage levels. The price of TFF, Europe's benchmark gas contract, now trades around €25 ($27) per megawatt hour compared with €56 a year ago.

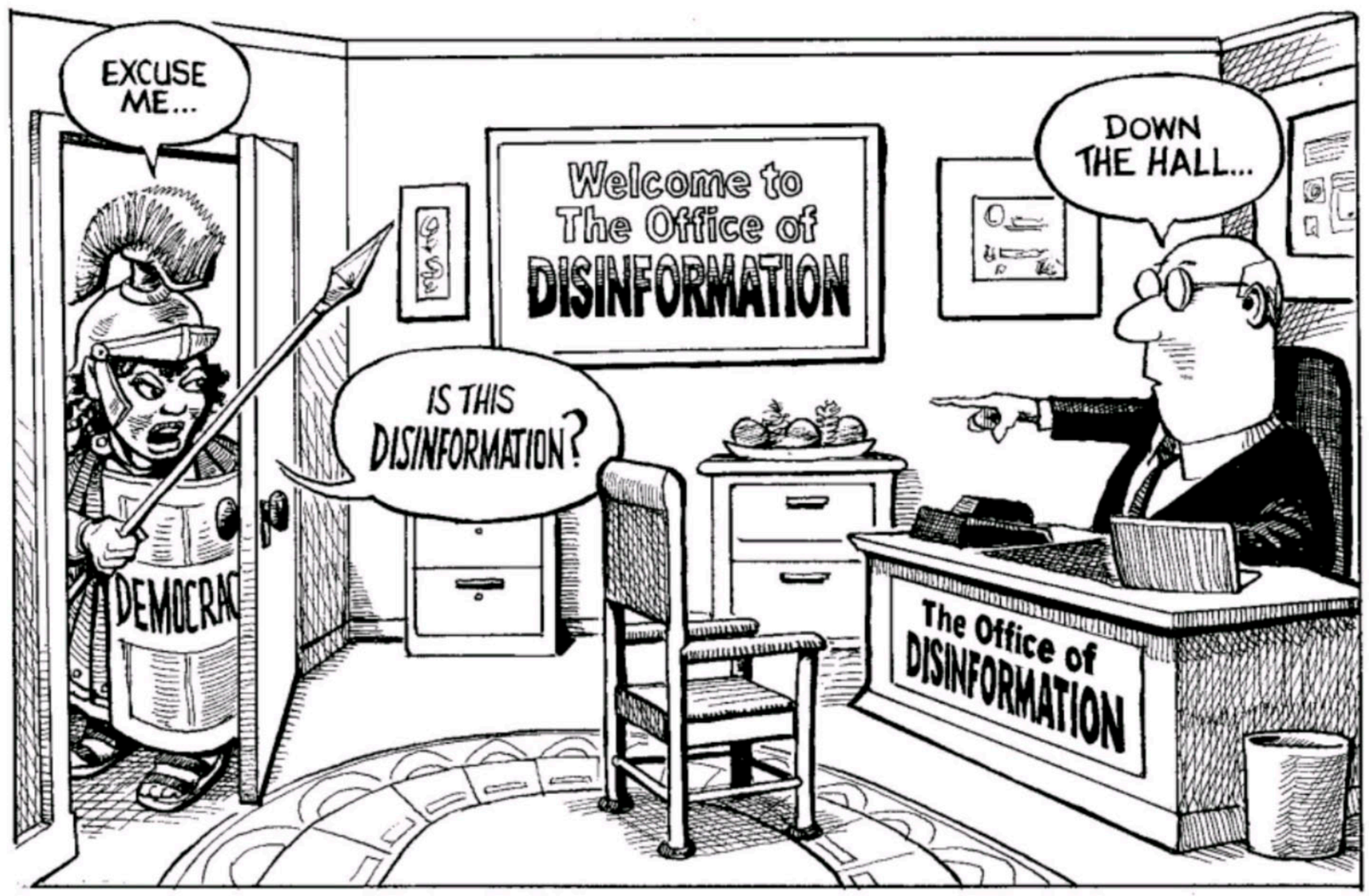
Oil prices reached five-month highs, amid concerns about conflict in the Middle East and attacks on Russian refineries. Brent crude traded close to $90 a barrel.

The euro zone's annual **inflation** rate fell to 2.4% in March, closer to the European Central Bank's target of 2%.

"Today we begin again," said **General Electric**, as it completed its transition to three stand-alone companies, each listed separately on the stock-market. GE Aerospace houses jet engines and aviation services, GE Vernova is the energy business, focusing on wind and gas turbines, and GE HealthCare supplies imaging, ultrasound and IT systems to hospitals. Founded in 1892, GE no longer exists as a conglomerate. Larry Culp, GE's boss, is now CEO of GE Aerospace.

Mr Trump's business model

The share price of **Trump Media**, Donald Trump's social-media platform, slumped after it revealed a huge drop in quarterly revenue and a yearly net loss. Trump Media only recently went public on the stock-market. In a regulatory filing the company's auditors noted that there is "substantial doubt about its ability to continue as a going concern". Meanwhile Mr Trump is embroiled in a legal fight with two founders of the business, claiming they shouldn't receive shares in it.



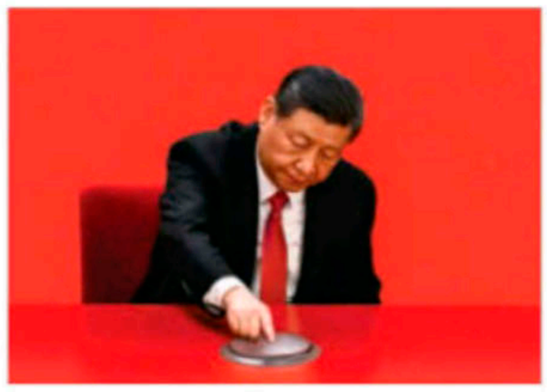
The Economist

China's risky reboot

Xi Jinping wants to escape economic stagnation using a high-tech revolution. His plans will backfire

IT IS CHINA'S gravest economic test since the most far-reaching of Deng Xiaoping's reforms began in the 1990s. Last year the country achieved growth of 5%, but the pillars of its decades-long miracle are wobbling. Its famously industrious workforce is shrinking, history's wildest property boom has turned to bust and the global system of free trade that China used to get richer is disintegrating. As our reporting explains, President Xi Jinping's response is to double down on an audacious plan to remake China's economy. Blending techno-utopianism, central planning and an obsession with security, this sets out China's ambition to dominate the industries of tomorrow. But its contradictions mean it will disappoint China's people and anger the rest of the world.

Compared with 12 months ago, let alone the go-go years, the mood in China is dour. Although industrial production perked up in March, consumers are depressed, deflation lurks and many entrepreneurs are disillusioned. Behind the angst lie deeper fears about China's vulnerabilities. It is forecast to lose 20% of its workforce by 2050. A crisis in the property industry, which drives a fifth of GDP, will take years to fix. It will hurt cash-strapped local governments that relied on land sales for revenues and flourishing real estate for growth. Relations with America are steadier, as a phone call between Mr Xi and President Joe Biden this week attested. But they remain fragile. Chinese officials are convinced that America will restrict more Chinese imports and penalise more Chinese firms, whoever wins the White House in November.



China's response is a strategy built around what officials call "new productive forces" (see Finance & economics section). This eschews the conventional path of a big consumer stimulus to reflate the economy (that's the kind of ruse the decadent West resorts to). Instead Mr Xi wants state power to accelerate advanced manufacturing industries, which will in turn create high-productivity jobs, make China self-sufficient and secure it against American aggression. China will leapfrog steel and skyscrapers to a golden era of mass production of electric cars, batteries, biomanufacturing and the drone-based "low-altitude economy".

The scope of this plan is breathtaking. We estimate annual investment in "new productive forces" has reached $1.6trn—a fifth of all investment and double what it was five years ago in nominal terms. This is equivalent to 43% of all business investment in America in 2023. Factory capacity in some industries could rise by over 75% by 2030. Some of this will be made by world-class firms keen to create value, but much will be prompted by subsidies and implicit or explicit state direction. Foreign companies are welcome, even though many have been burned in China before. Mr Xi's ultimate aim is to invert the balance of power in the global economy. Not only will China escape dependence on Western technology, but it will control much of the key intellectual property in new industries and charge rents accordingly (see Business section). Multinationals will come to China to learn, not teach.

However, Mr Xi's plan is fundamentally misguided. One flaw is that it neglects consumers. Although their spending dwarfs property and the new productive forces, it accounts for just 37% of GDP, much lower than global norms. To restore confidence amid the property slump and thereby boost consumer spending requires stimulus. To induce consumers to save less requires better social security and health care, and reforms that open up public services to all urban migrants. Mr Xi's reluctance to embrace this reflects his austere mindset. He detests the idea of bailing out speculative property firms or giving handouts to citizens. Young people should be less pampered and willing to "eat bitterness", he said last year.

Another flaw is that weak domestic demand means some new production will have to be exported. The world has, regrettably, moved on from the free-trading 2000s—partly because of China's own mercantilism. America will surely block advanced imports from China, or those made by Chinese firms elsewhere. Europe is in a panic about fleets of Chinese vehicles wiping out its carmakers. Chinese officials say they can redirect exports to the global south. But if emerging countries' industrial development is undermined by a new "China shock", they, too, will grow wary (see Chaguan). China accounts for 31% of global manufacturing. In a protectionist age, how much higher can that figure go?

The last flaw is Mr Xi's unrealistic view of entrepreneurs, the dynamos of the past 30 years. Investment in politically favoured industries is soaring, but the underlying mechanism of capitalist risk-taking has been damaged. Many bosses complain of Mr Xi's unpredictable rule-making and fear purges or even arrest. Relative stockmarket valuations are at a 25-year low; foreign firms are wary; there are signs of capital flight and tycoons emigrating. Unless entrepreneurs are unshackled, innovation will suffer and resources will be wasted.

China could become like Japan in the 1990s, trapped by deflation and a property crash. Worse, its lopsided growth model could wreck international trade. If so, that could ratchet geopolitical tensions even higher. America and its allies should not cheer that scenario. If China was stagnating and discontented, it could be even more bellicose than if it were thriving.

Old reductive forces

If these flaws are obvious, why doesn't China change course? One reason is that Mr Xi is not listening. For much of the past 30 years, China has been open to outside views on economic reform. Its technocrats studied global best practice and welcomed vigorous technical debates. Under Mr Xi's centralising rule, economic experts have been marginalised and the feedback leaders used to receive has turned into flattery. The other reason Mr Xi charges on is that national security now takes precedence over prosperity. China must be prepared for the struggle ahead with America, even if there is a price to pay. It is a profound change from the 1990s and its ill-effects will be felt in China and around the world. ■

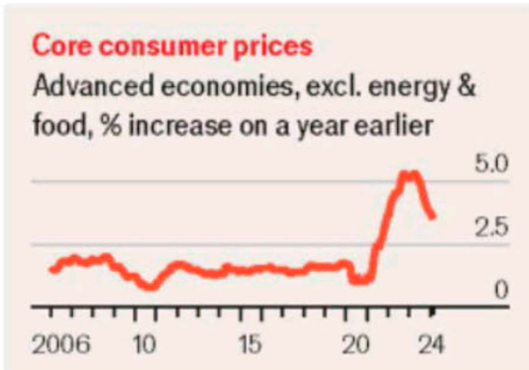
Monetary policy

Fool me once

Central banks have spent down their credibility. That will make their job harder for years to come

NOT LONG ago the rich world was braced for a costly battle with inflation. Today it can seem as if the war has been won bloodlessly. In most rich countries annual core inflation, which excludes volatile food and energy prices, has fallen from peaks of 5-8% to a more tolerable 3-5%. In defiance of pessimistic economists, there has been no accompanying economic slump. Growth varies from booming (America) to respectable (Australia, Canada, Japan) to tepid (Britain, the euro area), but nowhere has it collapsed. In contrast to the disinflation of the 1980s, unemployment has stayed low. Has the world economy enjoyed salvation without sacrifice? Sadly, the answer is no; high inflation has left scars.

Before the covid-19 pandemic, the rich world enjoyed decades without any serious inflation problems. After ruthless monetary tightening in the 1980s, followed by a movement towards independent central banks targeting inflation, price surges seemed as outdated as shoulder pads. As firms and workers came to assume that inflation would stay low, they kept prices and wages in check. Their expectations thereby proved self-fulfilling.



Unfortunately the idea that inflation was dead also lodged in the minds of central bankers. When prices started to rise in 2021 they were horribly slow to respond. Eventually they lifted interest rates much higher than they had initially thought necessary. Today faster-than-expected disinflation has allowed them a sigh of relief. Last month Jerome Powell, the chairman of the Federal Reserve, said that interest-rate cuts were not far away—although he seemed more guarded in a speech on April 3rd. Andrew Bailey, governor of the Bank of England, has celebrated an "increasingly positive story" (see Britain section).

But central bankers' problems are not over. Inflation remains above their targets. In Europe it is likely to fall further, but only because the economy is weak. In America getting inflation down to the Fed's 2% goal probably cannot be achieved at the current rate of economic growth, which is fuelled in part by an unsustainable government deficit.

Most important, the public is more attuned to the danger of inflation than it was before the pandemic. Some surveys show an uptick in long-run inflation expectations. Financial markets in America and Britain are charging a bit more for long-term inflation protection than they did. Predictions for future inflation have become more dispersed, meaning more people doubt whether inflation targets will be hit. In other words, now that high inflation is no longer a distant memory, the credibility of central banks looks fragile.

It could shatter if another shock like the pandemic strikes. Inflation expectations rising definitively would cause inflation to persist until central banks brought about a painful slowdown. That was just about avoided this time, but further testing episodes are likely. Geopolitical tensions, trade wars, climate change and governments' fondness for fiscal stimulus will all make inflation more volatile than it was in the sleepy decades after the 1980s. The risk is two-sided: Europe, especially, still faces the danger of inflation falling below the 2% target, owing to a weak economy.

The combination of volatile inflation and diminished credibility means that the rich world's policymakers must be agile. They will need to adjust interest rates more quickly and to a greater extent when inflation fluctuates—and tolerate the resulting economic volatility. In so doing they will come to look a bit like their colleagues in emerging markets. Without as long a record of low inflation behind them, central banks in Brazil, Chile and Poland all raised interest rates sharply in 2021; all have since cut them as inflation has fallen. Move fast and forcefully: this is the rule book that the likes of Mr Powell and Mr Bailey will have to follow. ■

Deterrence

A world without America's protection

Donald Trump's threat to dump allies would risk a nuclear free-for-all

NUCLEAR DETERRENCE works—or at least it has so far. To understand how, look at the war in Ukraine. America and Europe arm their ally but dare not deploy combat troops against Russia. In turn, Russia dares not strike at the West. Mutual terror ensures that nuclear powers do not attack each other overtly, just as it stopped the cold war from turning hot, even though plenty of proxy conflicts raged. A sign of success is that only nine countries have nuclear arms—fewer than once feared, and fewer than the number of states able to make them.

As NATO this week marks the 75th anniversary of the signing of the North Atlantic Treaty, thank the generosity of "extended deterrence", by which America has sheltered European and Asian allies under its nuclear umbrella. It has done so in part to contain foes and in part to dissuade friends like Germany, Japan and South Korea from going nuclear themselves.

A return of Donald Trump as president threatens to sow chaos at a time when the world's nuclear balance is more unstable (see Briefing). His threat to let Russia "do whatever the hell they want" to NATO allies that spend too little on defence risks destroying the trust that makes extended deterrence possible. That could produce the nightmarish nuclear free-for-all that America has always sought to avert (see Culture section). ▸▸

As the world's first atomic power, America has long tried to stop others from going nuclear. Wonks call it the "nth-country problem": the more countries have nukes, the more others will want them, the likelier the risk of uncontrolled crises, the greater the constraints on American power and the higher the danger that America itself will be nuked. Deterrence with two superpowers during the cold war was scary enough; with ever more nuclear powers, it may become impossibly complex.

America thus attempted to prevent nuclear proliferation by an often undeclared but far-reaching "strategy of inhibition" based on three pillars: norms and treaties such as the Nuclear Non-Proliferation Treaty of 1968; coercion of friends and foes by diplomacy, sanctions and threats of military action; and reassurance through military alliances and security guarantees.

Extended deterrence is counter-intuitive, in that America risks the homeland for the sake of allies. The promise, firm enough to deter the Kremlin, has always been plagued by some doubt. To strengthen it, America has deployed troops and nuclear weapons in Europe, and has given allies a role in nuclear missions. Winston Churchill is said to have quipped that all he needed to defend Europe was one American soldier, "preferably dead".

Mr Trump, neck-and-neck with President Joe Biden in the polls according to our tracker, sees allies as a burden, not an asset. His contempt mattered less in his first term, when the world was quiet (for which he likes to take credit). Now America is deeply involved in wars in Ukraine and Gaza, and clouds are gathering over Taiwan. A nuclear race looms as Russia issues threats and China builds up its nuclear arsenal.

Nobody knows quite what Mr Trump would do; even he may not be sure, despite his bluster about ending the war in Ukraine in a day. But his comments, former advisers' accounts of his desire to leave NATO and hare-brained proposals by putative future ones all point to a reduction or abandonment of American security guarantees to NATO, and so to allies generally. Congressional Republicans' months-long blocking of a bill to provide aid to Ukraine, Israel and Taiwan is a bad omen.

Allies will hope that, as in Mr Trump's first term, conventionally minded members of his administration will somehow help limit the damage. But some Trump-world figures say that NATO countries which do not spend 2% of GDP on defence should not be protected by the pledge that an attack on one ally is an attack on all. Others propose a "dormant" NATO, in which America withdraws ground forces from Europe while preserving the nuclear umbrella. Such ideas are nonsense. America cannot defend the martial east of Europe without protecting supply lines through the laggardly west. And would Mr Trump risk a nuclear attack on American cities to help Europeans whom he would not defend conventionally?

European governments are thinking the unthinkable. Poland's foreign minister, Radoslaw Sikorski, warns that a failure to keep arming Ukraine could push allies into "their own nuclear-weapons programmes". Politicians from Germany to South Korea have said similar things. Others talk of "Europeanising" NATO and substituting Britain's and France's nuclear weapons for American ones, though their combined stockpiles are less than a tenth of Russia's and their doctrines for protecting the rest of Europe still embryonic. European allies are preparing to take up more of the burden of helping Ukraine, hoping to "Trump-proof" themselves.

None of this can substitute for credible American deterrence. A world without American power endangers America for two reasons: because foes like Russia and China will feel emboldened, and because friends will lose faith in their old ally. "America First" isolationism, far from insulating the country, will only magnify the nuclear risks America faces. ■

Computers

Beware malware

The internet is worryingly exposed to malicious attacks. How to protect it?

FEW INVENTIONS in history have been as important for human civilisation and as poorly understood as the internet. It developed not as a centrally planned system, but as a patchwork of devices and networks connected by makeshift interfaces. Decentralisation makes it possible to run such a complex system. But every so often comes a chilling reminder that the whole edifice is uncomfortably precarious.

On March 29th a lone security researcher announced that he had discovered, largely by chance, a secret backdoor in XZ Utils. This obscure but vital piece of software is incorporated into the Linux operating systems that control the world's internet servers. Had the backdoor not been spotted in time, everything from critical national infrastructure to the website hosting your cat pictures would have been vulnerable.

The backdoor was implanted by an anonymous contributor who had won the trust of other coders by making helpful contributions for over two years (see Science & technology section). That patience and diligence bears the fingerprints of a state intelligence agency. Such large-scale "supply chain" attacks—which target not individual devices or networks, but the underlying software and hardware that they rely on—are becoming more frequent. In 2019-20 the SVR, Russia's foreign-intelligence agency, penetrated American-government networks by compromising a network-management platform called SolarWinds Orion. More recently Chinese state hackers modified the firmware of Cisco routers to gain access to economic, commercial and military targets in America and Japan.

The internet is inherently vulnerable to schemes like the XZ Utils backdoor. Like so much else that it relies on, this program is open-source—which means that its code is publicly available; rather like Wikipedia, changes to it can be suggested by anyone. The people who maintain open-source code often do so in their spare time. A headline from 2014, after the uncovering of a catastrophic vulnerability in OpenSSL, a tool widely used for secure communication, and which had a budget of just $2,000, captured the absurdity of the situation: "The Inter- ▸▸

net Is Being Protected By Two Guys Named Steve."

It is tempting to assume that the solution lies in establishing central control, either by states or companies. In fact, history suggests that closed-source software is no more secure than is the open-source type. Only this week America's Cyber Safety Review Board, a federal body, rebuked Microsoft for woeful security standards that allowed Russia to steal a signing key—"the cryptographic equivalent of crown jewels for any cloud service provider". This gave it sweeping access to data. By comparison, open-source software holds many advantages because it allows for collective scrutiny and accountability.

The way forward therefore is to make the most of open-source, while easing the huge burden it places on a small number of unpaid, often harried individuals. Technology can help, too. Let's Encrypt, a non-profit, has made the internet safer over the past decade by using clever software to make it simple to encrypt users' connections to websites. More advanced artificial intelligence might eventually be able to spot anomalies in millions of lines of code at a stroke. Other fixes are regulatory. America's cyber strategy, published last year, makes clear that the responsibility for failures should lie not with open-source developers but "the stakeholders most capable of taking action to prevent bad outcomes".

In practice that means governments and tech giants, both of which benefit enormously from free software libraries. Both should expand funding for and co-operation with non-profit institutions, like the Open Source Initiative and the Linux Foundation, which support the open-source ecosystem. The New Responsibility Foundation, a German think-tank, suggests that governments might, for example, allow employees to contribute to open-source software in their spare time and ease laws that criminalise "white hat" or ethical hacking.

They should act quickly. The XZ Utils backdoor is thought to be the first publicly discovered supply-chain attack against a crucial piece of open-source software. But that does not mean it was the first attempt. Nor is it likely to be the last. ■

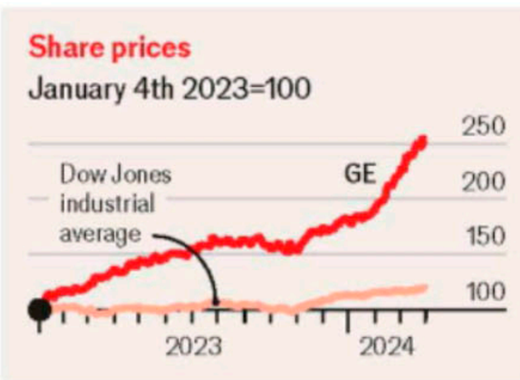
American business

Turnaround lessons

What General Electric's final act means for Boeing, Disney and others

ONLY RARELY are chief executives appointed with a mandate for dismemberment. Yet when Larry Culp assumed the top job at General Electric (GE) in October 2018, he was expected to sell parts of the 130-year-old conglomerate at a pace even faster than his empire-building predecessors had assembled them. In November 2021 he announced a radical finale: splitting the firm in three. GE's health-care business became a separate company last year. On April 2nd its power division went the same way, leaving behind GE Aerospace, the firm's engine-making operation (see Business section).

Investors are reaping the rewards. After dithering during the first four years of Mr Culp's tenure, GE's shares have been on a jet-fuelled tear. The cumulative stockmarket value of GE's three successor firms is $237bn. Although that is well below the firm's peak of $594bn in 2000, it is more than double what Mr Culp inherited. Business-school students have spent decades dissecting the hubristic acquisitions that defined GE's life. Now they must heed the lessons from its final act.



The fact that the wind is at GE's back has undoubtedly helped. Demand for jet engines has picked up since the covid-19 pandemic ended and clean-energy projects are benefiting from government handouts in America. The bullish mood of America's stockmarket has surely eased the separation process, too. But Mr Culp also deserves praise. His tenure reflects not just a victory of focus over sprawl, but also of operational excellence at a firm that long suffered the effects of excessive financial engineering.

One advantage was that Mr Culp was an outsider—the first ever to take the helm at GE. The turnaround probably could not have been pulled off by a lifer. GE insiders had ossified. Nothing had replaced Six Sigma, a system used to reduce manufacturing errors that was championed by Jack Welch, the firm's acquisitive boss who retired as long ago as 2001. Mr Culp brought his own Japanese-style management philosophy. The fresh but fanatical approach to continuous operational improvement helped usher in cultural change. So did getting executives onto the factory floor.

The new thinking meant that GE's assets did not languish on the chopping block, but improved on Mr Culp's watch and stopped the break-up becoming a fire sale. The programme has a familiar taste for fanciful names—the power business has been christened GE Vernova. But the markets are cheering on GE's heirs, which is striking given that spin-offs often disappoint investors. IBM's infrastructure-services business (Kyndryl) and Johnson & Johnson's consumer health-care operation (Kenvue) have both failed to shine in the public markets.

Mr Culp's success, then, is vindication for smooth operators, not firms looking to ditch problem assets or activist hedge funds in search of conglomerate discounts. Bosses preparing to lop off divisions of their own firms, including those at Unilever, will study him closely. But there are broader lessons, too. Disney, which recently prevailed in a proxy fight against Nelson Peltz, a noisy shareholder who once lobbied for change at GE, is just one American blue-chip firm that might benefit from fresh thinking.

The lessons may be most apt for Boeing, a case study for rotten corporate culture. In March its boss resigned, two months after the blowout of a fuselage panel from one of its 737 MAX planes. Some have suggested Mr Culp for the job, which would be a severe test of his operational prowess. In March Boeing confirmed that it was in discussions to acquire Spirit AeroSystems, an unsatisfactory supplier it had previously spun off. Mr Culp says he is happy running GE Aerospace, one of Boeing's suppliers. But if he can manage a business well while pulling it apart, perhaps he could also thrive at putting one back together again. ■

Letters

LETTERS ARE WELCOME AND SHOULD BE ADDRESSED TO THE EDITOR AT:
THE ECONOMIST, THE ADELPHI BUILDING, 1-11 JOHN ADAM STREET, LONDON WC2N 6HT
EMAIL: LETTERS@ECONOMIST.COM. MORE LETTERS AVAILABLE AT: ECONOMIST.COM/LETTERS

Carbon pricing

I was surprised by the lack of any analysis of economic instruments to price carbon-dioxide emissions in your excellent special report on the oil industry (March 16th). Many economists regard such carbon-pricing mechanisms as critical to achieving climate goals. European companies such as Shell have promoted these tools since around 2000.

Indeed, at a meeting convened in the Vatican in 2019, at which I was present, the chief executives of all the big American and European oil companies, together with important investors, signed a declaration calling for governments to establish "reliable and economically meaningful carbon-pricing regimes, whether based on tax, trading mechanisms or other market-based measures...at a level that incentivises business practices, consumer behaviour, research, and investment to significantly advance the energy transition while minimising the costs to vulnerable communities and supporting economic growth".

Although carbon pricing is spreading around the world it would be interesting to see an analysis of its successes and failures, explaining why this important economic tool has not been more enthusiastically embraced. Is it suspicion of the support by industry, reluctance of state-owned companies, focus on supply-side restrictions by environmental groups, or fear of a consumer backlash?

I look forward to an article in *The Economist* on this issue. We need as many tools as possible to accelerate the energy transition.

MARK MOODY-STUART
Former chairman of Shell
Hassocks, Sussex

All handbags are useful

Free Exchange (March 9th) drew a false parallel between cars and handbags. A car that is a lemon is not fully functional, reducing its utility and value. But a knock-off handbag that looks authentic even to people who actually care about these things has the same utility as a genuine one. The interesting question is why this has such a big effect on its value.

DAVID CHRISTMAS
London

A fight at the museum

"What's in store" (March 9th), which described the vast collections held by many museums as a "hoarding problem", was amusing but also a mixed bag of facts. Unlike some art museums, natural-history museums don't sell specimens, not even herrings (which are "pickled" in something no one should ingest).

The article implied that natural-history collections are mausoleums, when in fact the specimens from any one big museum are being studied by hundreds of scientists around the world every year. They are a profoundly dynamic source of original discovery, especially in the Natural History Museum in London.

If anything, natural-history museums aren't exploring and surveying the world enough. We know there are hundreds of thousands of new species out there, maybe millions, based on what we find in museums. What are they? Where are they? What will happen to them? Without museums we will never know. In that respect you pointed to a critical problem. The staff who look after collections have become skeletal in number.

DR DAVID GRIMALDI
Curator
Division of Invertebrate Zoology
American Museum of Natural History
New York

My guitar gently weeps

What's missing from every discussion about generative artificial intelligence and music is the question of who's going to listen to any of it ("Algorithm and blues", March 23rd). AI does indeed make it easier for amateurs and professionals alike to generate more and more recorded music, just as four-track cassette did in the 1980s, digital audio workstations did in the 1990s, and so on. There is already an enormous glut of recorded music. According to Luminate, a music-data firm, 184m tracks are available on streaming services, of which 43% had ten or fewer streams last year and 25% had none at all. Generative AI will only accelerate this pace. Meanwhile, actual demand for recorded music is barely growing.

No one in the music industry wants to talk about this, because businesses want to maintain the illusion that anyone can be the next Taylor Swift or Beyoncé. But this phenomenon will surely disrupt the industry as profoundly as all the other ways your article suggests.

BILL ROSENBLATT
Adjunct professor of music and performing arts professions
New York University

What it means to be British

As an immigrant I couldn't agree more with your positive assessment of immigration in Britain ("Britain's superpower", March 23rd). An underappreciated part of British assimilation is the use of the term "British". It is a national term, unique in Europe, that connotes a national identity separate from an ethnicity.

So although many immigrants probably never feel they can comfortably call themselves French, German or Italian, or indeed English or Welsh, we can always feel a sense of belonging through Britishness.

MARK KELLER
London

Berlin seemed woefully provincial to me after I moved to London to study for a master's degree in 2011. In London I rented from a British Indian family, opened my bank account with a clerk who, judging by his name, came from a Muslim family, and at university many of the teaching staff and students I came into contact with were from other countries, or their families once were. Unthinkable in Germany, and not just back then. I agree with your assessment that Germany has a lot to learn from Britain about integrating immigrants.

Perhaps in return we could teach Britain a thing or two about proportional representation or a non-hereditary upper house of Parliament?

ARNDT LEININGER
Assistant professor for political science research methods
Chemnitz University of Technology
Chemnitz, Germany

X factor, the final

A reader's plea that *The Economist* stops using the phrase "formerly known as Twitter" is timely and welcome (Letters, March 16th). You only recently repeated George Orwell's sage advice that "if you can cut a word out, always cut it out" ("Shock! Horror! The Economist has updated its guide to good writing", January 25th).

Since Twitter's name change came into effect there have been 1,575,910 uses of the phrase "formerly known as Twitter" in English-language news media, according to my quick search using a media-monitoring tool. That's 6,303,640 words. There are fewer than 800,000 words in the King James Bible. Ernest Hemingway took only 27,000 words to win the Pulitzer prize for "The Old Man and the Sea", and the bold ambitions of the UN Charter required a mere 9,000.

At a time when words matter so much, can we agree to omit these four words and devote the considerable space this will leave to something, anything, else?

JAMES TATE
Henley-on-Thames, Oxfordshire

I agree that you should stop using the phrase "formerly known as Twitter". Much better would be "X, known as Twitter to everyone but its capricious owner".

CHRISTOPHER LEPOCK
Edmonton, Canada

Briefing Nuclear weapons

The balancing act gets harder

America, and its allies, are entering a period of nuclear uncertainty

IS DETERRENCE EASY or hard? That simple question has been at the heart of nuclear strategy for almost 80 years. For Bernard Brodie, an early nuclear theorist, the bomb had created a stable balance of terror. The precise number and variety of weapons was less important than the fact that they existed. His colleagues Herman Kahn and Albert Wohlstetter disagreed. The balance was "precarious", they retorted, and required careful and continuous attention to metrics such as the relative damage that each side would suffer in a nuclear exchange and thus to the relative size and quality of their respective arsenals.

In America that debate is returning to the fore. A growing number of influential American thinkers believe that deterrence is becoming harder and could become precarious. Great-power rivalry has grown, making an intensification of nuclear competition more likely. Arms-control agreements have frayed. Amid the rising tensions, which have helped bring renewed attention to the world-changing impact of nuclear weapons (see Culture section), the spectre of Donald Trump looms large. His return to office could see a disruption to American alliances that prompts allies in Asia and Europe to look afresh at their own nuclear options.

Whichever candidate wins November's election will preside over a nuclear complex in the midst of a 30-year, $1.5trn makeover. That involves projects as varied as designing a new warhead and cruise missile, making new plutonium pits (the fissile cores inside warheads) and building new submarines, bombers and intercontinental ballistic missiles (ICBMs).

These programmes enjoy bipartisan support but were finalised in the 2010s during a different geopolitical era. One shift came with Russia's invasion of Ukraine and Vladimir Putin's use of nuclear threats to deter Western involvement there. Another was the growth of China's arsenal from fewer than 300 warheads in 2019 to 500 today, and as many as 1,000 by the end of the decade, according to the Pentagon. As a result, America increasingly worries about facing two big nuclear rivals at once.

Nuclear planners now contemplate problems that would have seemed irrelevant and ghoulish just a decade ago. "How much strategic value to the United States is there in having the capacity to conduct a counter-nuclear attack against a second nuclear power after conducting and suffering a large nuclear strike by the first?" asks a recent paper by the Lawrence Livermore National Laboratory, one of the labs involved in nuclear modernisation. If America were to wage a nuclear war with China, say, might Russia "cross...the nuclear threshold in order to strike a decisive blow to defeat a hated enemy and gain a dominant position"?

Nuclear sceptics argue that these challenges have been exaggerated. America's arsenal remains ten times larger than that of China. Nor does the war in Ukraine offer unalloyed support for more nukes. "The strategic nuclear balance has not appeared to play a significant role in this crisis," points out Francis Gavin, a nuclear historian at Johns Hopkins University. "It is notable how little discussion there has been ov- ▸▸

er the state, readiness and size of the two largest nuclear powers' forces." That might suggest America would cope just fine even if Russia and China were to outnumber it.

Yet sceptics are on the back foot. In October a bipartisan congressional commission, which included officials who had served in both the Obama and Trump administrations, warned that "nuclear force sizing and composition must account for the possibility of combined aggression from Russia and China." America would need to be capable of "simultaneously deterring both countries". In short, it required a larger and more diverse arsenal.

That appetite is already influencing American policy. The Trump administration initiated work on a new submarine-launched nuclear-armed cruise missile, known by the acronym SLCM-N, arguing that it would provide more flexible nuclear options. The Biden administration sought to cancel the project, arguing that it was expensive and unnecessary. Congress cast aside those objections to establish SLCM-N as a "programme of record"—the slate of established projects, like the new ICBM—last year. In March the Senate approved spending a further $130m on the programme. Not bad for an unwanted nuke.

Don't you understand...

For advocates of a more muscular nuclear posture, that is just the start. In a recent report, Robert Peters and Ryan Tully of the Heritage Foundation, a pro-Trump think-tank, lay out a menu of options. America, they argue, should accelerate the production of plutonium pits. Existing ICBMs, which carry only one warhead, should be modified to carry more. Their replacement, the Sentinel, should not just sit in silos but potentially be designed to scoot around on roads—something that would represent a huge (and expensive) change in America's nuclear posture. Frank Miller, a veteran of American nuclear policy, argues that the country needs around 3,500 deployed weapons, compared with the 1,670 it has today within the constraints of the New START treaty, which limits the number of missiles, bombers and total warheads deployed by America and Russia.

If Mr Biden is re-elected, most of these ideas will surely languish. Even under Mr Trump there are obstacles to a nuclear spree. "Four years is a very short time in the nuclear-modernisation arena," says Rose Gottemoeller, a former diplomat who served as America's top arms-control official. She says that Mr Trump would struggle to reopen the programme of record without worsening the existing cost overruns and delays. The Pentagon would also resist cutting funds for conventional military forces to expand nuclear ones.

Still, Mr Trump would have considerable latitude in other respects. America does not have the ability to produce vast numbers of new warheads. But it has around 1,900 nuclear weapons in reserve (see chart). It could roughly double its deployed arsenal by "uploading" these to current missiles and other delivery systems. Russia could surge by 57%, adding just under 1,000. Today this is constrained by New START. Last year Russia withdrew from the treaty's inspection regime, in a sign that its days are numbered. The bipartisan commission is urging the air force and navy to practise uploading warheads from now to 2026, when the treaty expires. If it does indeed lapse, both countries can then do it for real.

Another option, favoured by some of Mr Trump's advisers in private, would be to resume explosive nuclear testing. America, Russia and China have not conducted such tests since the 1990s, relying instead on computer modelling. Mr Trump, in his first term, accused China and Russia of covertly carrying out "low yield" tests and considered a change in policy. In recent years there have been signs of tunnelling, new facilities and heightened traffic at test sites in America, Russia and China. That probably reflects each country hedging against a potential shift by another.

None of this is a foregone conclusion. Mr Trump "might very well pursue arms control with Russia and China to show he's a dealmaker", suggests Jeffrey Lewis of the Middlebury Institute of International Studies at Monterey, pointing to the former president's theatrical meetings with Kim Jong Un, North Korea's dictator, in 2018 and 2019. "The big question", says Mr Lewis (who is also the author of a chilling novel on a nuclear conflict with North Korea), "is whether Trump would buck the Republican Party on missile defence."

China and Russia operate limited national missile-defence systems. They have long argued that America's more ambitious efforts, which expanded after George W. Bush withdrew from a 1972 US-Soviet treaty, undermine deterrence by allowing America to conduct a first strike and then block any retaliation. That has probably encouraged Russia and China to build larger and, in Russia's case, more diverse, nuclear arsenals.

America has pressed on regardless. In exchange for curbing the development of missile defences, it could perhaps ask Russia to include its large arsenal of tactical or "non-strategic" nukes as part of any future arms-control deal and demand that China sign on too. But in January Mr Trump publicly endorsed missile defences, invoking the success of Israel's (completely unrelated) Iron Dome system. And putting these on the negotiating table would cause internal tension in a future administration, warns Mr Lewis: "It tugs at two parts of Trump's self-image: his view of himself as a consummate dealmaker and his enthusiasm for high-tech weapons."

...what I'm trying to say

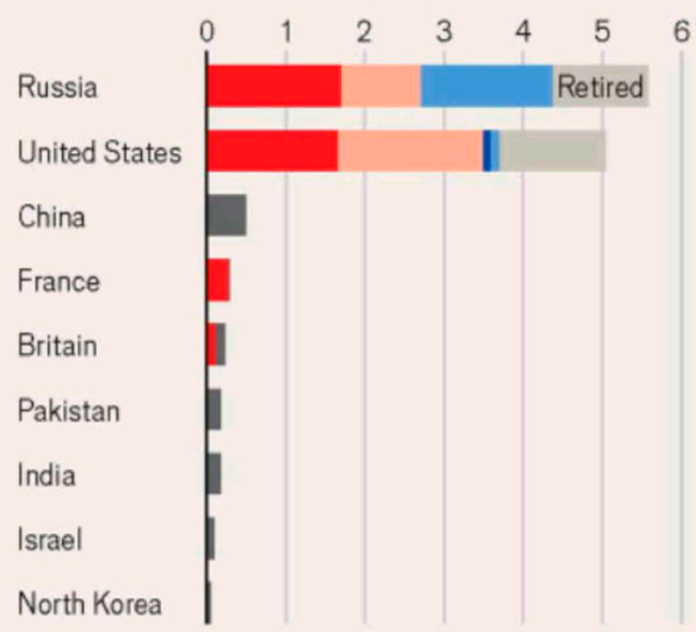
If Mr Trump were to embrace the hawks' agenda, it would send ripples through Moscow and Beijing. Russia is probably already preparing for the collapse of New START, says Kristin Ven Bruusgaard of the Norwegian Intelligence School, and would use any new American plans or weapons for "propaganda bluster". However, Russia has its own financial and material constraints. The war in Ukraine could cost it $132bn by the end of this year, estimates the RAND Corporation, an American think-tank. The country is not short of warheads. But new delivery systems are overdue and over budget. "In capability terms," says Professor Ven Bruusgaard, "my impression is that the Russians are more or less racing as fast as they can."

China has more fiscal headroom, but a shortage of plutonium might constrain its arsenal over the next decade or so. And the rush to build weapons might also have led to "cutting corners", suggests Tong Zhao, an expert at the Carnegie Endowment for International Peace, another think-tank, alluding to reports of faulty silo doors and water-filled missiles. Its build-up was also initiated before its economy began to slow down last year. "China's current nuclear expansion might be pushing its limits," concludes Mr Zhao. The upshot of all this is that any arms race is likely to be slow and halting, rather than fast and furious.

For America's allies, the calculation is rather different. European members of NATO and several Asian countries, including Japan and South Korea, are protected by America's nuclear weapons, under "extended deterrence". Many would welcome Mr Trump building more nuclear weapons

Piling up

Estimated nuclear-warhead inventories, '000
By type, March 2024



Source: Federation of American Scientists

or newer ones. The SLCM-N, for instance, has many supporters in Europe and Asia because some allies believe it would help America respond to low-level nuclear use by Russia or China in kind without resorting to strategic weapons like ICBMs, which would trigger a larger nuclear exchange and thus lack credibility as a deterrent in such circumstances.

But a nuclear build-up would be little consolation to allies if it were accompanied by a dramatic change in the nature of their alliances. Though Mr Trump recently said he intended to remain in NATO (provided America's partners paid their "fair share"), European and Asian allies alike wonder whether he would come to their aid. Moreover, North Korea's acquisition of ICBMs makes American cities vulnerable in a way they previously were not, while the growth of China's arsenal means that America would suffer more damage in any nuclear exchange than in the past. That would worry even an ally-hugging president, let alone Mr Trump.

Can't you feel the fears...

Mr Biden's solution to this problem has been to double down on reassurance. He has deepened consultation with Japan and South Korea on nuclear issues and in July 2023 sent a nuclear-armed submarine to make a public port call in South Korea for the first time since the 1980s. Even so, Japan has stockpiled plenty of plutonium and would have the necessary technical expertise to build a nuclear device. South Korea's hedging is much starker: it is the only non-nuclear-armed country in the world to have developed submarine-launched ballistic missiles, which could serve as a delivery platform for any future bomb.

During Mr Trump's first term South Korea's nuclear debate played out under the presidency of Moon Jae-in, a dove who took North Korea at its word on disarmament, points out Jennifer Ahn of the Council on Foreign Relations, a think-tank in New York. Mr Moon's administration gave short shrift to the idea of bringing back American tactical nuclear weapons, withdrawn in 1991, let alone developing indigenous ones. His successor, the "conservative and deterrence-focused" Yoon Suk-yeol, she notes, is a different matter.

"It's possible that the problem gets worse and our country will introduce tactical nuclear weapons or build them on our own," mooted Mr Yoon in January 2023. "It would not take long," he added, "given our scientific and technological capabilities." Mr Yoon later backtracked, saying in February that the result would be heavy sanctions. Yet more than 70% of South Koreans remain in favour of acquiring nuclear weapons. If Mr Trump were to renew his quixotic effort to strike a deal with Mr Kim by reversing America's policy of "denuclearisation", legitimating North Korea as a nuclear power, or if Mr Kim were to resume nuclear tests—he has not conducted one in seven years—that could also intensify South Korean nuclear ambitions.

Europe's predicament is different. Unlike Asia, it has two local nuclear powers, Britain and France. Britain's deterrent is "assigned" to NATO, which means that it is available to the Supreme Allied Commander Europe, while France is more ambiguous, saying only that its vital interests have a "European dimension". On paper, their combined arsenal of 500 warheads, though a tenth of Russia's, is sufficient to wipe out Moscow and St Petersburg, and more. Yet a closer look at the British arsenal is useful to understand why an American umbrella is difficult to replace.

Consider a scenario in which Russia uses a tactical nuclear weapon against a European ally. One problem, say some officials, is that Britain's deterrent is vested entirely in the Trident D5 missiles aboard a lone submarine. Firing even one could give away the position of the sub, says a former British official. That would risk the survival of the remaining missiles, which serve as a deterrent against subsequent strikes on Britain itself. One option would be to maintain two boats on patrol, but that would require a total fleet of five rather than four. An alternative would be to build an air-launched cruise missile of the sort operated by France. Either option would be expensive and would not yield fruit until long after Mr Trump was off the scene.

These debates, in Asia as well as in Europe, are likely to percolate regardless of whether Mr Trump defeats Mr Biden in November, and even if he keeps alliances intact. They reflect concerns about a deteriorating security environment in which wars of conquest are imaginable again, nuclear weapons are growing more important to a stronger China and a weaker Russia, and America's political system seems more frail than ever and its armed forces increasingly overstretched.

In February Radoslaw Sikorski, Poland's foreign minister, suggested that if Ukraine cannot drive Russia back "allies will look for other ways to guarantee their safety. They'll start hedging. Some of them will aim for the ultimate weapon, starting off a new nuclear race." Mr Sikorski quickly insisted that he was talking of Japan or South Korea, not his own country. But Poland, he remarked at the same event, would "eat grass rather than become a Russian colony again"—a phrase that to many unmistakably evoked Pakistan's commitment in the 1970s to develop a bomb at any cost, even if that required it to "eat grass", as Zulfikar Ali Bhutto, the country's prime minister at the time, put it.

...I'm feeling today?

Ultimately, the anxiety over Mr Trump reflects a reckoning with the inherent oddity of America's nuclear alliances. Deterrence is intuitive: don't nuke me, because if you do I will nuke you back. Extended deterrence is perverse: attack my ally and I might nuke you, exposing myself to nuclear retaliation that I would not otherwise have faced. To extend a nuclear umbrella over allies is thus not only to build a larger and more varied arsenal than would otherwise be needed, but also to accept, voluntarily, an extraordinary vulnerability.

That is strange enough. But it is "bizarre" for an American state that, thanks to its geography, would otherwise face no existential threats, says Professor Gavin. "It's not really in America's DNA." America took on the burden in the 1950s nonetheless, exposing its cities to annihilation, because it did not want allies developing nuclear bombs of their own—a pursuit that in the case of West Germany might have provoked a third world war, he adds. Extended deterrence and non-proliferation were intimately connected. The question is whether that coupling might one day snap.

"In many ways", mused Donald Trump, months before being elected president in 2016, "the world is changing. Right now, you have Pakistan and you have North Korea and you have China and you have Russia and you have India and you have the United States and many other countries have nukes." Perhaps Japan would be "better off" with nuclear weapons, he suggested. As so often with Mr Trump, the problem lies in knowing when to take him literally and when merely seriously. "The level of power of nuclear weapons is incredible," he told an interviewer last December. "Whether it's Israel or major countries, nuclear weapons are the biggest problems we have." ■

United States

The Biden campaign

Like a dream to me now

YPSILANTI, MICHIGAN

What Michigan says about the 2024 election

STANDING IN FRONT of a few dozen Democratic Party members in a shopfront in Ypsilanti, a town just south-east of Ann Arbor, Debbie Dingell, a congresswoman from Michigan, delivers the bad news. "None of you believed me in 2016 when I said that Donald Trump could win," she says. "Too many people don't know why we gotta elect Joe Biden. We aren't talking about what he's gotten done the last four years." She then goes on to list half a dozen reasons why Mr Biden's re-election is crucial, starting with the environment, women's reproductive rights, the economy, health care and then finally, how Donald Trump is "splitting Americans apart" with his violent rhetoric. "It's more important now than it's ever been to turn out the votes," she concludes. "Ground Zero is right here right now."

Ms Dingell was speaking at the opening of one of 30 campaign offices that Mr Biden's campaign will soon have operating across the Wolverine State, a decisive swing state during the past two presidential elections. In 2016 Mr Trump won Michigan with a margin of just 0.3%. In 2020 Mr Biden took it back for the Democrats by 2.8%. State Democratic officials are confident that they can repeat the trick this year, and they cite a remarkable campaigning machine built since 2017 as evidence. "We are organising and talking to voters all the time," says Lavora Barnes, the Democratic chairwoman. But Ms Dingell's warning rings true too. Michigan is thus a good place to take the pulse of Mr Biden's campaign. The president is running a traditional playbook, while Mr Trump's approach to electioneering is as unconventional as ever.

Ms Barnes is right that Democrats have a significant organisational advantage over their opponents. Nationwide Mr Biden's campaign committee has raised $129m to $96m raised by Mr Trump, and the cash is flowing into Michigan. As well as opening offices, the party is hiring staffers at pace. Phenomenally peppy 20-somethings are moving from all over the country to take up campaign jobs. An army of pensioners with lots of free time is already equipped with yard signs and bumper stickers to distribute to their neighbours.

By contrast, Mr Trump's campaign is far less visible. On April 2nd the former president held a modest rally in Grand Rapids, attended mostly by journalists and local Republican officials. But the campaign is only now "putting in place the building blocks" of its organisation, says Pete Hoekstra, the party chairman. "We are not counting offices," he says, when asked if any have opened yet. For much of the past year, Michigan Republicans have been in disarray. In January members voted to oust their chair, Kristina Karamo, a vocal proponent of the theory that the 2020 election was rigged, over complaints that she was mismanaging the party and its finances. In the end it took a lawsuit to get her to step down. At one point last year a dispute between two party officials ended in a physical fight, with a county chairman appar- ▸▸

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ently complaining that a fellow activist had "kicked me in my balls".

Yet a ground-game advantage does not guarantee that Mr Biden will win the state. Most evidence from political science suggests that door-knocking has at most a marginal effect, generally by boosting turnout. It certainly cannot replace a persuasive message. The early campaign suggests that Democrats may have too many points to make and have yet to craft a unified argument.

Take for example the talking points of Gretchen Whitmer, Michigan's popular Democratic governor. Asked at another office opening, this one in Livingston County, a Republican-leaning suburb northwest of Detroit, what she expects the message of the election to be, at first she replies frankly: "Everything's about the economy." But then she adds: "Our ability to make our own decisions about our body, when and whether or not to bear a child, that is the most important economic decision a woman will make over the course of her lifetime." In addition, she continues, education and climate change matter, as does "onshoring supply chains". These things, she says, are "all going to be absolutely central to what's on voters' minds."

The breadth of the message reflects the challenge Democrats face in Michigan, particularly at presidential level. To beat Mr Trump, the party needs to make sure that committed Democrats turn out in large numbers, particularly in the state's urban strongholds in Detroit and Ann Arbor. Already that base is rather divided. It includes college students, black blue-collar workers, white professionals, the liberal elderly and the more unionised of the white working class. A few older activists in Livingston mentioned unprompted their disdain for digital campaigning, arguing that it doesn't persuade anyone new. By contrast, young voters are deeply online. "I really think that a lot more people now get their beliefs based off of, like, Instagram and TikTok," says Jacob Welch, the president of Michigan's College Democrats organisation. He worries that Mr Biden's support for Israel in Gaza is putting young voters off.

What unites the base most is, as Mr Welch puts it, that they all "despise Donald Trump". But the party also needs to win over at least a few people who might be tempted to vote for him. Ms Barnes says that one of the reasons Hillary Clinton lost the state in 2016 was that she prioritised making sure solid Democrats turned out to vote, and neglected trying to persuade people on the fence. "There was a lot of focus on just turnout," particularly in big cities, she says. Now they are trying to reach areas Democrats don't usually touch—hence the opening of offices in places like Livingston. "I think that there are a lot of fair-minded, thoughtful folks who have voted Republican in the past," she says.

The tricky thing is that those voters may require different messages, and sometimes they pull across each other. The voters Mr Biden needs to tempt away are also a diverse mix. They include wealthier, more socially liberal suburban Republicans but also blue-collar workers. Jacob Hilliker, the Michigan representative for LiUNA, a large trade union that represents mostly workers in the construction trade, and which has endorsed Mr Biden, says the case for Mr Biden for his union members is that "he's done nothing but make it rain jobs like nobody has before". When asked about the appeal of culture-war issues, such as abortion or IVF, he demurs. "I have my personal views on abortion rights, guns, the right to hunt in Michigan," he says, without specifying what they are. "We are here to fight for jobs."

Mr Trump's message, by contrast, is crude but simple. "You're under an invasion," he told his audience in Grand Rapids. Flanked by a gaggle of sheriffs, and two television screens showing a chart of border crossings, he argued that Joe Biden is letting criminal "illegal aliens" and useless Chinese electric cars flood into Michigan. (He said the crime rate in Venezuela has fallen, which is true, and suggested it is because so many wrong-uns have been sent to America, which is not.) To fix this, he proposes to whack monstrous trade tariffs on Mexico, to stop Chinese firms building cars there, and to "begin the largest domestic deportation operation in the history of our country". For good measure he also added that he would give police officers accused of wrongdoing complete immunity from litigation.

Shawn Fain, the leader of the United Auto Workers union, says Mr Trump "is like the third-grader running for class president, you know, he wants to give a free candy machine to everybody in the class." He points out that when the union went on strike last year, Mr Biden visited them, whereas Mr Trump, as president, shunned a strike in 2019. But even Mr Fain admits he sometimes has to work to persuade his members. "You can claim you love Trump or whatever the hell your reasoning is. And if you do that, so be it. I feel for you. But at the end of the day, facts are facts," he says. "He's just flat-out a con man."

Mr Biden's best hope is to pull all these strands together over the next seven months. In Livingston County, Dan Luria, the county party vice-chairman, adds his own ideas. Mr Biden, he says, ought to "reappropriate the concept of freedom". Freedom, he says, ties everything together—from reproductive rights to the economy. Also, he adds, you can put out a lot of American flags. That is one bit of advice the Biden campaign is sure to follow. ■

Abortion politics

Florida woman

WASHINGTON, DC

A ruling by Florida's Supreme Court has Democrats hoping the state is in play

TWO DECISIONS by Florida's Supreme Court shook up the Sunshine State this week. The first, which paves the way for a six-week abortion ban to start on May 1st, will have immediate consequences for millions of women in the South. The second, which approved a ballot initiative that would amend Florida's constitution to protect abortion, could prove even more significant. A referendum in November will allow Floridians to have a decisive say on the state's abortion policy.

The court's first decision in effect upholds a six-week ban passed by the state legislature and signed by Florida's Republican governor, Ron DeSantis, last year. Only limited exceptions beyond that period are allowed, making Florida one of the most restrictive states in the land. The decision to allow abortion onto the ballot follows an energetic grassroots campaign that collected over 1m signatures (reportedly 150,000 of them registered Republicans). The two rulings have left Democrats believing that they now may have a shot at winning the state in November's presidential election.

The implications of the six-week ban are serious. Florida accounted for about one in 12 abortions in America in 2023—a total of more than 86,000. And because the state has become a destination for women from neighbouring states with stricter rules, the ruling will hurt them too. Florida

Gone 'til November

was one of the states that saw the greatest increase in abortions following the *Dobbs* ruling that overturned *Roe v Wade*. The state's ban will cut off nearly all access to abortion in the South.

Those women will need to go elsewhere for terminations beyond six weeks, a point at which many do not even know they are pregnant. Some will try to get their hands on abortion pills by post. Although unlawful under Florida's ban, such pills are increasingly available. Other women will have to travel long distances for an abortion. No single state is big enough to make up the difference.

Yet in the longer term, the extremity of the ban could, perversely, help women who are seeking abortions. This is because of the court's decision to allow Floridians to vote on a constitutional right to abortion until viability (typically 23-24 weeks). If over 60% of voters support the amendment, the six-week ban would be overturned.

Such ballot initiatives have sprung up around America since the *Dobbs* decision. In all six referendums held so far, voters have chosen to protect abortion. Abortion-rights advocates in a dozen states are now trying to place the issue on the ballot in November. Democrats across the country hope these referendums will mobilise voters who otherwise may not have felt inspired to get out and vote for Joe Biden.

In Florida, that looks like a decent bet. Most Floridians, including 60% of Republicans, oppose a six-week abortion ban, and will now have an opportunity to stop it. (A second referendum, also allowed on to the ballot by the state court, on the recreational use of marijuana, is also bound to mobilise some voters.)

Whether this potential mobilisation of otherwise stay-at-home voters will prove sufficient to swing the state for Mr Biden is another matter. Nikki Fried, chair of the Florida Democratic Party, thinks that the state is back in play. "Everything is on the line," she says. She predicts "a ground game that we really haven't seen in the state of Florida since Obama."

The polls are certainly on Democrats' side: 81% of Americans recently told an Ipsos/Axios poll that abortion should be managed between a woman and her doctor, not the government. And yet pollsters and political scientists warn that the Democrats may need a reality check. The party has haemorrhaged registered voters in Florida in recent years, a shift that helped Mr DeSantis win by a 20-point landslide in 2022.

"This is not just about whether Biden can win Florida," says Aubrey Jewett, a political scientist at the University of Central Florida. Even with the abortion-rights referendum, that will be very hard, he reckons. But the race looks more competitive than it was a week ago. ■

Marriage

The rise of the remote husband

NEW YORK

She goes out to work, he stays at home (and logs on)

IN COSTA MESA, a city in California's wealthy, beachy Orange County, she is working her way up to becoming a partner in the local office of a major law firm; he is an executive at a tech startup based in the Bay Area, more than 400 miles away. In Cambridge, Massachusetts, he is writing code from their apartment just off-campus, while she attends her classes at Harvard Law School. She is an obstetrician, he works remotely for a tech company; she is an academic at an Ivy League university, he works for a crypto company. All over the country, among the well-heeled and well-educated, a new trend appears to be emerging. When the wives head out in the morning, to their offices, classrooms or hospitals, they are waving goodbye to their husbands, who remain at home.

This is hardly a gender-swapped 1950s revival. The men are still working, after all, not predominantly cooking, cleaning and caring for children. But it does reflect an underappreciated effect of the rise of remote work: the rise of the remote husband.

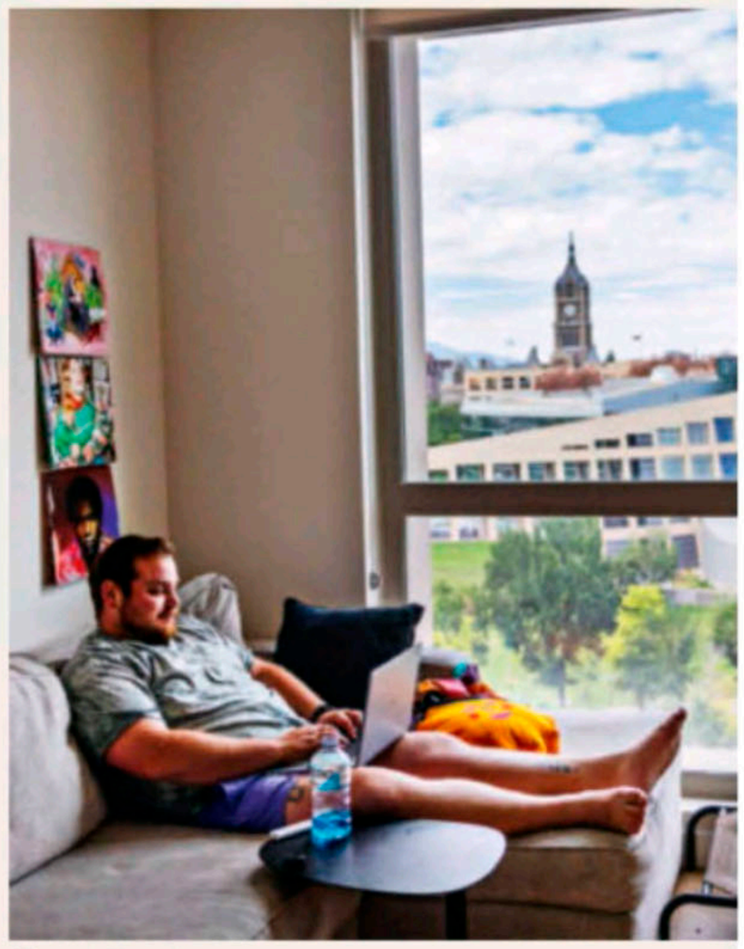
Men and women still specialise in different kinds of work. Jobs in industries like computer science and engineering are disproportionately performed by men. Teaching and nursing jobs are dominated by women. Professions like law and medicine may still employ more men than women, but the scales are tipping: more women than men are enrolled in law school and medical school. As such, among young couples, she is probably more likely to be going to be a lawyer or a doctor than he is.

Different occupations have also had to take different approaches to remote working. A minority of medical professionals may be able to work remotely, by taking telehealth jobs, but the vast majority have to treat their patients in person. Lawyers may be tied to a specific state or area by their licence and speciality. Meanwhile, the industries which reported the highest level of remote-work flexibility are coding and technology, architecture, engineering and business jobs. About half of people working in computer or mathematical jobs work remotely full-time.

The upshot is that, in aggregate, it is easier for men to work from wherever they please. A survey carried out by McKinsey, a consultancy, found that 38% of working men had the option to work remotely full-time, compared with 30% of women. Roughly half of women report being unable to work remotely at all, compared with 39% of men.

This may sound like yet another way in which women have ended up with the short end of the stick. But that view is myopic. Couples compromise in all kinds of ways for their lives to work together. If she is offered a big promotion, conditional on moving to Chicago, she may have to turn it down if his job is tied to New York. The geographical liberation of either partner makes it possible for the other to ascend the corporate ladder. The Costa Mesa couple picked that area because it was convenient for her job—and for access to their children's grandparents, who now regularly entertain the little ones.

Claudia Goldin, a Nobel laureate, has written about how remote work may be a boon for women. Over the past 200 years women's participation in the labour force has been highest when it has been possible to perform paid work from home. She has also found that gender wage gaps are tightest in fields where flexible working is the norm. But it is not only flexibility in the work that women do that may be to their advantage.



Feminist icon

The cost of drugs

Joe Biden and the $900 eczema cream

WASHINGTON, DC

Bits of the IRA would be very popular, if more Americans knew about them

BUYING PRESCRIPTION drugs in America can feel a bit like being a tourist haggling at a street market. First, a ludicrous "retail price" is mentioned (for your correspondent recently, $902 for eczema cream for a child). Then insurance is applied, followed by a layering-on of coupons (often printed by the pharmacist and then handed to themselves), discount cards and rebate claims. And yet even after all that, the amount of cash you pay out of pocket is still steep by international standards (the cream ended up costing $273).

Americans agree on few things, but lowering the price they pay for medication is the most popular policy position in American politics, tied with support for Social Security. Nine in ten say this should be an important or top priority for Congress. In his state-of-the-union message Joe Biden spent a full three minutes on the topic. Yet only one in four say they are aware of his attempts through the Inflation Reduction Act (IRA) of 2022 to reduce prices. This is something he needs to rectify.

At least as interesting as the direct impact of the law is the question of what the indirect ones might be. Americans spend twice as much on prescription medication per person as comparable countries, according to Peterson-KFF, a health-research group. This spending is skewed by branded drugs with no competitors, so-called non-generic drugs. These make up 10% of prescription drugs but 80% of spending. Adjusted for inflation, spending on prescription drugs has increased from $101 per person in 1960 to $1,147 in 2021.

The IRA, which was mainly a climate-change and industrial-policy law, did actually have some provisions designed to bring down prices (although not in the short term). One politically important one relates to Medicare, the public-health insurer for the elderly which covers prescription drugs for 50m people. The IRA empowered Medicare administrators to negotiate with (or maybe dictate to) drugmakers, which they had long been forbidden to do.

A gentle, circling motion

This should eventually reduce the price consumers pay. In the near term, the IRA also capped some out-of-pocket drug costs. The first to feel the effects of these measures are people with diabetes who need insulin, a drug for which Americans pay several times what Europeans pay. A national out-of-pocket cap of $35 per insulin prescription per month has meant that, since January 2023, millions enrolled in Medicare now pay less.

Another tangible result is an annual cap on out-of-pocket spending. Doug Hart, a 77-year-old from Arizona with heart disease, previously spent about $7,000 per year on prescription medication. Under the new cap, which is being phased in, he will be on the hook for only the first $3,300 this year, before Medicare foots the rest of the bill. From next year, the cap will be lowered to $2,000. "The way I see it, Biden is saving me $5,000 in out-of-pocket drug costs [and] I can go and see my grandkids in Chicago instead," he says.

These measures have been relatively easy to implement because, if anything, the pharma industry welcomes them: they make drugs cheaper for consumers while the government picks up the difference. But Mr Biden's law also gives Medicare a mandate to negotiate drug prices directly with manufacturers and penalises those that raise prices above inflation. This has met with more hostility from the industry, which argues that it will crimp innovation. Yet it is this part that will make a difference for taxpayers: without it, the price caps for consumers will just push high drug bills on to the government. Mr Biden's claim that he has already saved American taxpayers $160bn thanks to these negotiations is misleading, because it relies on projections of future government savings.

Negotiations between the government and Big Pharma are under way behind closed doors. Drug companies are keen to reassure shareholders that the government's proposals are not as outlandish as feared. Yet at the same time they have filed several lawsuits challenging the legislation. One way or another, the federal agency that administers Medicare will publish a list of the "maximum fair price" for each of the first ten negotiated drugs by this September, with the intention of introducing these discounts by 2026. Medicare spending on these ten drugs more than doubled between 2018 and 2022.

There is also the question of what the knock-on effects of the IRA will be. Mr Biden has said he will try both to increase the number of drugs subject to negotiation and expand the $2,000 out-of-pocket cap to people with private insurance. Once the prices that Medicare pays for expensive drugs are published, this might increase the bargaining power of private insurers too. "Now that the government has these new tools, there are huge opportunities to go beyond [the IRA]," says Richard Frank of the Brookings Institution, a think-tank. "If you can suddenly negotiate more drug prices, earlier in their life cycle, or these prices apply to the entire private market, then suddenly this is not an incremental change—this is a sea change," says Benedic Ippolito at AEI, another think-tank.

The president's campaign team will be hoping that enough people notice the new, reduced Medicare drug prices in September—just in time for the election. But another scenario is just as likely: Mr Trump wins and claims credit for Mr Biden's achievement, because the price reductions would not actually come into force until 2026. That would be the Trumpiest move. Either way, patients should benefit. ■

The Golden State

Future imperfect

SACRAMENTO

California is gripped by interlocking economic problems, with no easy solution

HOME TO MANY of America's most progressive policies, from criminal justice to vehicle emissions, California serves a unique role as a punchbag for right-wing politicians. Every few years it becomes fashionable to declare that it is a failed state, or that the California dream is turning into a nightmare. This is overblown: in terms of pure economic heft, California remains the most powerful American state. But for all its continuing prowess in innovation, California is again entering one of its periodic rough patches.

It is salutary to remember that California has experienced worse. In the early 1990s, reeling from a deep recession, more than 1m Californians left for other states. In 2000-01 a mismanaged electricity market (plus Enron's corruption) led to blackouts. In 2009 California began writing IOUs to businesses, students and taxpayers. Throughout California's many brushes with economic trouble, its innovation-led growth model has been remarkably resilient. The state accounted for about 14% of America's total output last year, up from 12.5% in the late 1990s.

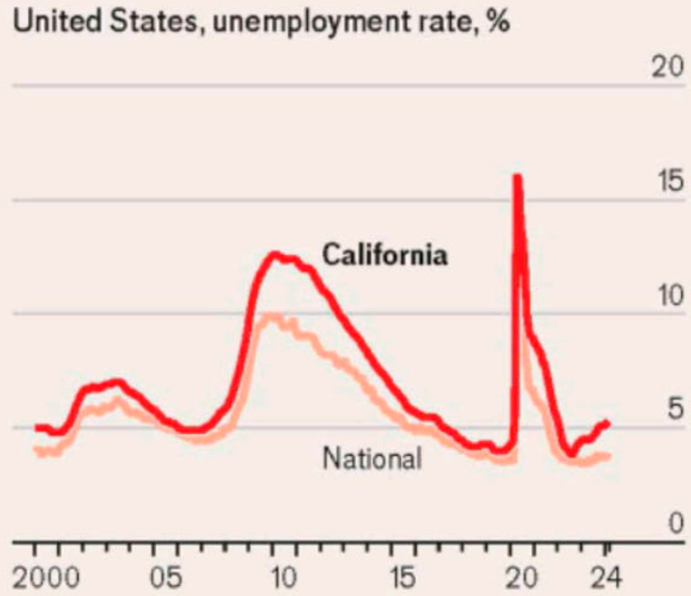
"People are always judging us on past metrics. So they're looking at what's receding, and not enough at what is emerging," says Dee Dee Myers, a senior adviser to the governor. She points to rising stars across different parts of the state: AI, quantum computing, space tech, immunotherapy, electric vehicles and more. California has the largest higher-education system in the country, more national laboratories than any other state, a location that makes it the gateway for a third of America's foreign trade and—rumour has it—some pretty nice beaches and mountains.

Right now, though, the state faces three overlapping challenges: rising unemployment, growing fiscal strains and population outflows. They mark out California as a pocket of relative weakness in an otherwise robust American economy.

While the national unemployment rate remains less than 4%, within spitting distance of a six-decade low, in California the unemployment rate has shot up to 5.3%, the highest of any state (see chart). On the surface, the reason for the rise in joblessness is no bad thing: as the aftershocks of the covid pandemic fade away, more people are actively seeking jobs, and until they find work they show up in official data as unemployed. The deeper problem is that

Situation wanting

United States, unemployment rate, %



Source: Bureau of Labour Statistics

the state does not have enough work for them. In California there are roughly 0.8 job openings per unemployed person—the lowest in the country—whereas in America's other 49 states the overall ratio is 1.6.

Last year California's income-tax collection tumbled by 25%, similar to falls during the global financial crisis of 2007-09 and the dotcom bust of the early 2000s. In his budget for the new fiscal year, which begins on July 1st, Gavin Newsom, California's governor, projected that the state's deficit would hit $38bn. But the Legislative Analyst's Office (LAO), a nonpartisan fiscal adviser to California's legislature, estimates that it is on track to hit $73bn. A slightly different methodology accounts for half of that discrepancy. But however the numbers are sliced, California's constitution requires a balanced budget and it must find a way to close its fiscal hole.

The state has built up a rainy-day fund over the past decade, but Mr Newsom's proposed budget will draw down roughly half of it. Other solutions have involved deferring promised funding—for universities, and homeless and disabled people. That, however, will only add to shortfalls in the near future. "It might be easier to tell various stakeholders that the money has just been delayed, but the reality is much of it needs to be eliminated," says Gabriel Petek, head of the LAO.

As for the outflow of Californians—the third worry—it is not new. Since the early 1990s Californians moving out have usually outnumbered other Americans moving in. But in the past immigrants from abroad more than made up for the domestic outflows, such that California's population continued to grow. The slowdown in international arrivals during the covid pandemic changed that dynamic. California has recorded an outright decline in its population for three straight years, the first sustained drop since it became a state in 1850.

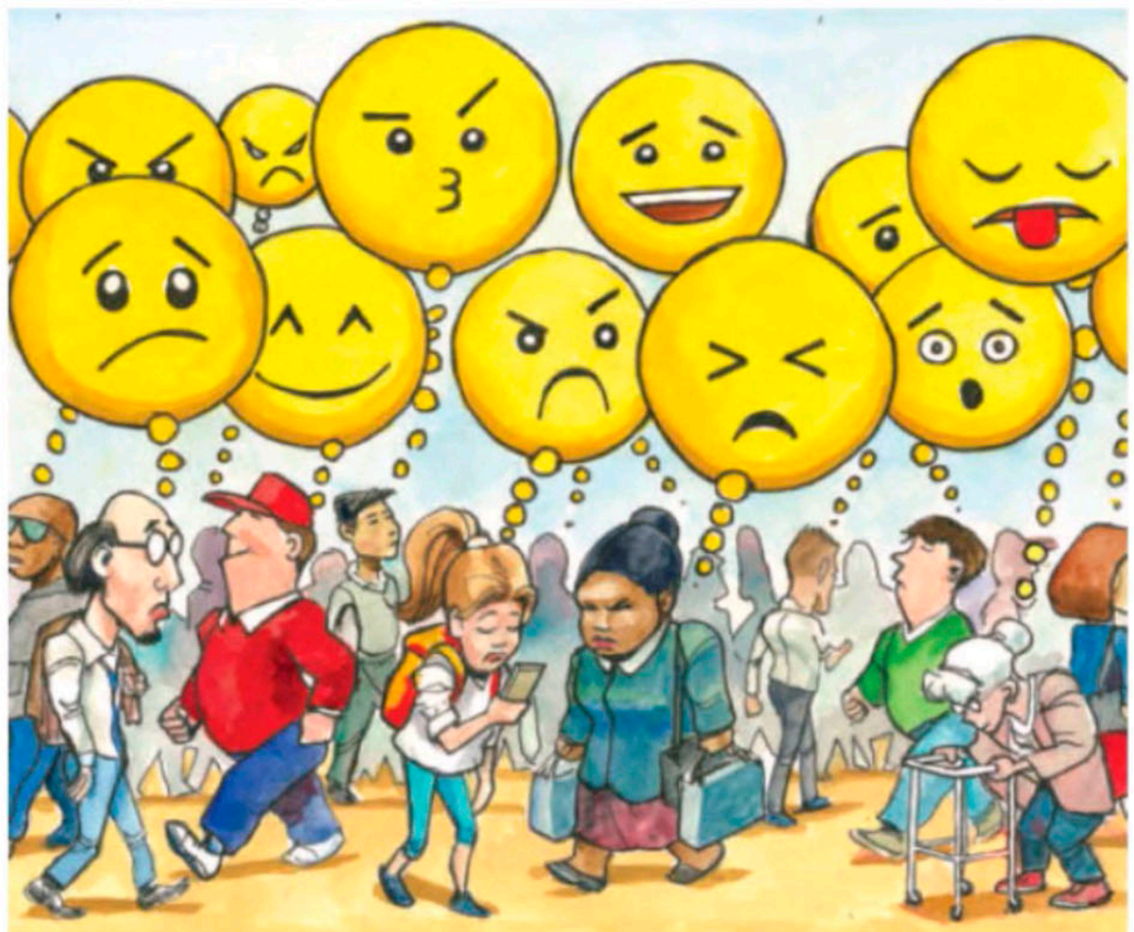
From a fiscal standpoint, the damage has been compounded by the wealth of those leaving. California has lost a steadily growing number of high-earning residents, with the trend accelerating at the height of covid. In 2021 the state lost nearly $30bn in net taxpayer income to other states, amounting to about 2% of its tax base. And given its reliance on capital-gains taxes as a big, if volatile, source of revenue, departures of the wealthy may hurt its future fiscal position. Raising taxes would be one possible solution. But doing so may just prompt more rich Californians to leave. ■

A terrible place, really

LEXINGTON

Are American progressives making themselves sad?

Conservatives seem more excited about change



SURELY FEW developments could be less surprising than the recent news that America has slipped down the global happiness rankings. Gallup reported in mid-March that America had dropped out of the top 20 for the first time since it started taking its survey in 2012, falling in a year from 15th place to 23rd. (Yes, annoyingly, Finland came out on top, for the seventh straight year.)

Their economy and technology may be the envy of the world, but Americans are becoming a dyspeptic bunch, anxious about the future and uneasy about foundational institutions, from the armed forces to the press to organised religion. Yet all are not equally sad. Numerous studies and surveys—Americans are obsessed with this subject—show that some groups tend to lag behind others in the pursuit of happiness: bankers are said to be sadder than lumberjacks, the unmarried sadder than the married, teenage girls sadder than teenage boys.

One distinction that holds true today has persisted for decades: liberals are sadder than conservatives. This is a global symptom of political difference, but it is particularly strong in America. Of whatever age group or whichever sex, liberals are also far more likely than conservatives to report having been diagnosed with a mental illness.

In the new Gallup survey self-reported happiness fell for every age group, but most precipitously for those 30 and younger. Older Americans ranked tenth globally in happiness, whereas younger Americans ranked 62nd. That is a change from a decade ago, when the two groups reported similar levels of happiness. The trend is consistent with data from the Centres for Disease Control and Prevention, which surveys 17,000 high-school students every two years. Rates of mental-health problems have increased with every survey since 2011, and last year the CDC reported the highest rates of sadness found in a decade, particularly among girls.

In a study in 2021 called "The Politics of Depression", a group of scholars zeroed in on the possible link between political ideology and unhappiness among teenagers. They found an alarming rise in depression among young people starting in 2012, and, like the CDC, a particular increase among girls. But ideological difference mattered more than gender difference. Liberal boys reported higher rates of depression than conservative boys or girls, and liberal girls reported the highest rates of all.

Disentangling correlation from cause to explain the happiness gap between conservatives and liberals has long vexed social psychologists and political commentators. So, no doubt, has the task of disentangling one's own politics from one's hypotheses. The authors of the study connected the rise of depression with the spread of social media. They also argued that conservative ideology may help protect mental health, for reasons that did not flatter conservatives: "This group presumably benefits from the American cultural myth of an equal playing field in which exceptional social positions are thought to be earned through hard work and talent rather than inherited through codified privilege." Liberal adolescents, they wrote, may feel alienated in contrast to conservative peers "whose hegemonic views were flourishing".

A possible flaw in this theory is that, in the first four years that young liberals' mental health declined, Barack Obama was president and conservative views were not so successfully hegemonic. Even before 2012, when teenagers reported relatively stable mental health, young liberals, like older liberals, reported higher rates of depression. Sceptics of the authors' hypothesis have noted that being conservative could confer psychological benefits for less cynical reasons. Conservatives tend to be healthier, more patriotic and more religious, and to report finding higher levels of meaning in their lives. These characteristics correlate with happiness.

It is possible that liberalism does not just correlate with sadness but may exacerbate it. Musa al-Gharbi, a sociologist at Stony Brook University, has noted that educated, affluent white liberals have come to endorse the idea that America is systemically racist, leading them to view other racial and ethnic groups more warmly than their own. "This tension—being part of a group that one hates—creates strong dissociative pressures on many white liberals," he wrote in the journal *American Affairs*. Another hypothesis, advanced by Jonathan Haidt, a social psychologist, and Greg Lukianoff, a lawyer, is that liberals are performing a reverse cognitive behavioural therapy on themselves: promoting not resilience and optimism about incrementally improving the world but catastrophic rumination about problems such as climate change and fearfulness of disagreement even on university campuses. Such habits of mind can deepen depression.

Mopes and change

Research has found liberals to be more empathetic than conservatives, so in a troubled world one might expect them to be sadder. But a profound shift appears to be under way when it comes to excitement about change. "One of the fundamental traits of the conservative attitude is a fear of change, a timid distrust of the new as such," wrote Friedrich Hayek in "The Constitution of Liberty" in 1960, "while the liberal position is based on courage and confidence, on a preparedness to let change run its course."

Mr Obama, whose summons to "hope and change" rhymed with his own biography, may have marked high water for this idea of American liberalism, as opposed to today's progressivism. President Joe Biden has negotiated potentially transformative legislation, but he presents himself as guarding against radical change. Donald Trump has robbed liberalism of its transgressive glamour and made conservatism mean its opposite: disruption, subversion, challenge to fuddy-duddies and the status quo—all that cool stuff. It's kind of depressing. ■

The Americas

Latin America's new right

The Anti-communist International

SANTIAGO

Latin America's new hard right was not built on fears about migration, but on traditional morals, opposition to socialism and a tough line on crime

"MR PRESIDENT!" Javier Milei could barely contain himself when he met Donald Trump at the Conservative Political Action Conference (CPAC) near Washington in February. The pair embraced and exchanged slogans, with Mr Trump intoning "Make Argentina Great Again" several times and Argentina's new president yipping "*Viva la libertad, carajo*" ("Long live freedom, dammit") in response.

Nayib Bukele, El Salvador's popular autocratic president, had already addressed the conference. "They say globalism comes to die at CPAC," he told enraptured Republicans. "I'm here to tell you that in El Salvador, it's already dead." Jair Bolsonaro, Brazil's hard-right former president, was a star guest in 2023. He, like Mr Trump, claimed without evidence that his bid for a second term was thwarted by fraud. His supporters also attempted an insurrection.

These scenes suggest a seamless international alliance between Mr Trump and the leaders of Latin America's hard right. Its members also include José Antonio Kast of Chile, who has spoken at CPAC in the past too. This new right basks in Mr Trump's influence. It has turned away from a more consensual form of conservative politics in favour of an aggressive pursuit of culture war.

Its ascent began with the surprise victory of Mr Bolsonaro in Brazil in 2018, followed by that of Mr Bukele in 2019. In Chile Mr Kast, the founder of a new hard-right Republican Party, got 44% of the vote in a presidential run-off in 2021 and his party won an election for a constitutional council in 2023. Mr Milei won his own surprise victory in November. Would-be leaders of the radical right jostle in the politics of Peru and Colombia.

Unlike its older European and North American equivalents, the Latin American hard right does not have roots in the fertile soil of public anxiety about uncontrolled immigration (although this has become an issue recently because of the arrival of millions of Venezuelans fleeing their country's rotten dictatorship).

The new group shares three hallmarks. The first is fierce opposition to abortion, and gay and women's rights. "What unites them is an affirmation of traditional social hierarchies," as Lindsay Mayka and Amy Erica Smith, two academics, put it. The second hallmark is a tough line on crime and citizens' security. And the third is uncompromising opposition to social democracy, let alone communism, which leads some to want a smaller state.

There were common factors in their ascents, too. They were helped by a sense of crisis—about corruption and economic stagnation in Brazil and Argentina, gang violence in El Salvador and the sometimes violent "social explosion" in Chile.

Cousins in arms

But each leader has adopted a different mix of these ideological elements. The hard right in Latin America are "cousins, not brothers", says Cristóbal Rovira of the Catholic University of Chile. "They are similar but not identical."

Mr Bolsonaro's constituencies were evangelicals, to whom he appealed with his defence of the traditional family, and the authoritarian right in the form of the ▸▸

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army, the police and farmers worried about land invasions and rural crime. But he was lukewarm about the free market and fiscal rigour. Mr Bukele made security the cornerstone of his first presidential term, overcoming criminal gangs by locking up more than 74,000 of El Salvador's 6.4m citizens. His economic policy is less clear and, despite his claim at CPAC, is not self-evidently "anti-globalist".

Mr Milei was elected for his pledge to pull Argentina out of prolonged stagflation and to cut down what he brands as a corrupt political "caste". A self-described "anarcho-capitalist", he is a fan of the Austrian school of free-market economics. Unlike Mr Trump, he is neither an economic nationalist nor protectionist on trade. He has only recently adopted his peers' stance on moral issues. His government supports a bill to overturn Argentina's abortion law, and says it will eliminate gender-conscious language from public administration. Mr Bukele followed suit.

Mr Kast attempted to put conservative morality in the constitutional draft his party championed, which was one reason why it was rejected in a plebiscite. He wants tough policies on security and against immigration. "We should close the borders and build a trench," he says. He wants to "shrink the state and lower the tax burden". Whereas Mr Bolsonaro is a climate-change sceptic and anti-vaxxer, Mr Kast is not.

Democracy for thee, not for me

Right-wing populists also have differing attitudes to democracy. With his attempt to subvert the election result, for which he is under police investigation, Mr Bolsonaro showed that he was not a democrat. Mr Bukele is contemptuous of checks and balances. His success at slashing the murder rate made him hugely popular, allowing him to brush aside constitutional term limits and win a second term in February.

Mr Milei's "disdain for democratic institutions is clear", says Carlos Malamud, an Argentine historian, citing Mr Milei's break with convention by giving his inauguration speech to a crowd of supporters, rather than to Congress. But, Mr Malamud adds, Mr Milei may yet learn that he needs to include the parliament in government.

"I'm a democrat," insists Mr Kast, and his opponents agree. "On security and shrinking the state, we share views with Bolsonaro," he says. "But that doesn't mean that we are the same as Milei or Bolsonaro or Bukele." As Mr Kast notes, policy choices are shaped in each country by very different circumstances.

So are the prospects of the various leaders. Mr Bukele is by far the most successful, with would-be imitators across the region and no obvious obstacles to his remaining in power indefinitely. In contrast, Mr Bolsonaro's active political career may well be over. The electoral court has barred him as a candidate until 2030 (when he will be 75) for disparaging the voting system at a meeting with foreign ambassadors. He may be jailed for his apparent attempt to organise a military coup against his electoral defeat; he denies this and claims he is a victim of political persecution.

Mr Milei's future is up for grabs. Succeed in taming inflation, and he could emerge strengthened from a midterm election in 2025. But if he refuses to compromise with Congress and provincial governors, he may be in trouble before then. In Chile, Mr Kast seemed to overplay his hand with the constitutional draft. The election in 2025 could see the centre-right take power. One influential figure of that persuasion argues that Mr Kast is unable to represent the diversity of modern Chile.

Ultimately, the group is bound by an international network built around common political discourse and cultural references. Mr Kast chairs the Political Network for Values, an outfit previously led by an ally of Viktor Orban, Hungary's populist leader. Vox, Spain's hard-right party, organises the Foro de Madrid, a network of like-minded politicians mainly from what it calls the "Iberosphere" in Latin America.

These gatherings offer a chance to share experiences and sometimes a bit more. Mr Bukele has advisers from Venezuela's exiled opposition. Mr Trump's activists have shown up at Latin American elections. Recently, Mr Bolsonaro took refuge in the Hungarian embassy in Brasília for two nights when he feared arrest.

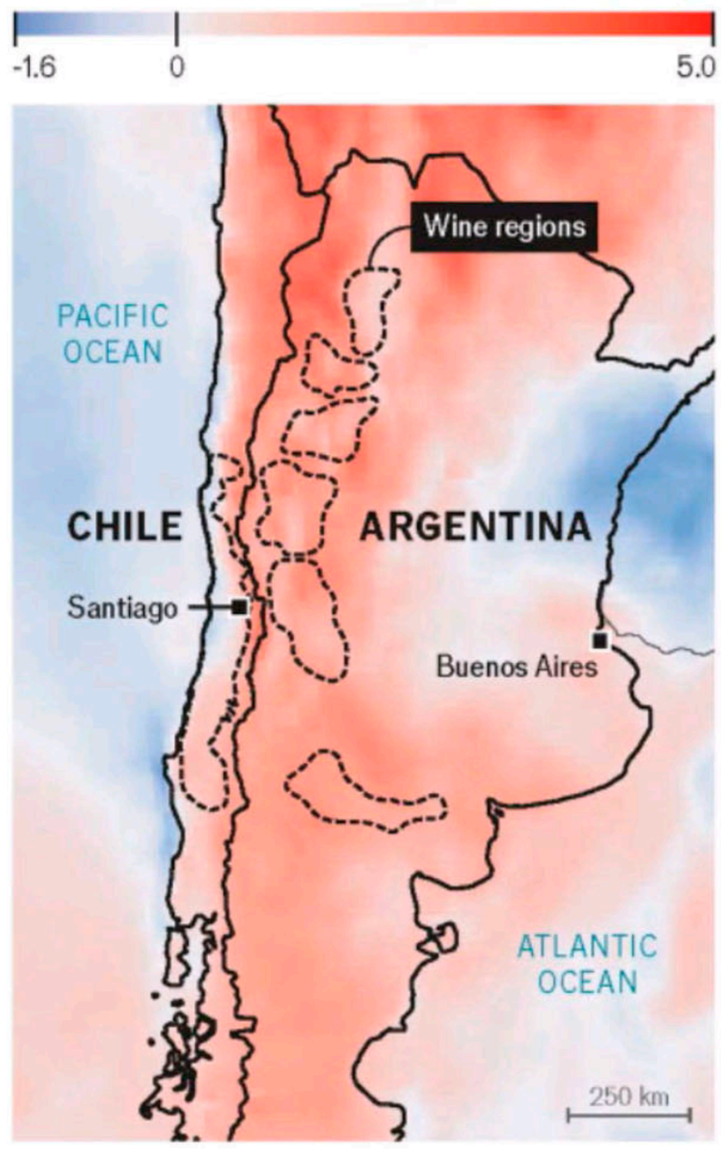
But there are no signs of central direction or co-ordination. The right in Latin America has long claimed that the Foro de São Paulo, a get-together of Latin American left-wingers, is a highly organised conspiracy. All the evidence is that it is a loose friendship network. That seems to be true of its right-wing peer, too. ■

Parched vines

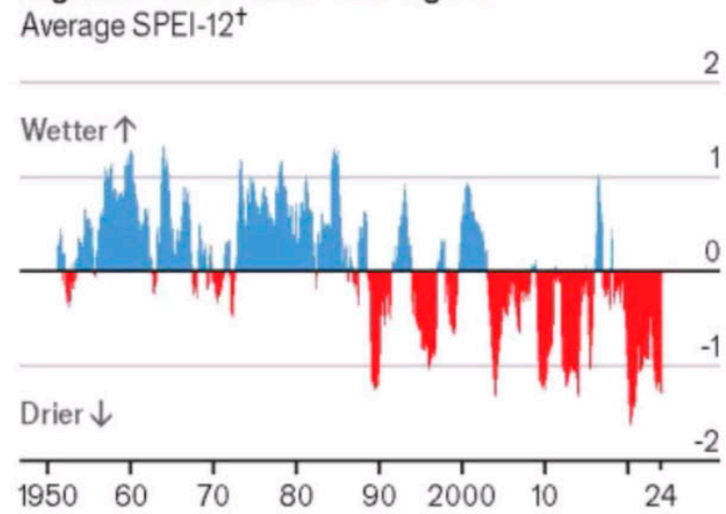
Chilean summers are getting hotter. That is bad news for vineyards. Irrigation relies on snowmelt from the Andes, which is becoming less reliable, while excessive heat itself harms the grapes. Wine production in Chile has fallen in four of the last five years. The picture is similar elsewhere in Latin America. The drop in wine output from the region accounted for one-third of the total decline in global production in 2023.

Moving higher into the Andes cuts the risk of heat-related damage, but exposes vines to other perils, including hail, landslides and flash floods. It takes a brave investor, with deep pockets, to stump up the cash for such a move. Outside Latin America, new vineyards are often funded by venture capital. But such sources of finance are comparatively scarce in the region. Most producers will probably end up staying put, and suffering the heat.

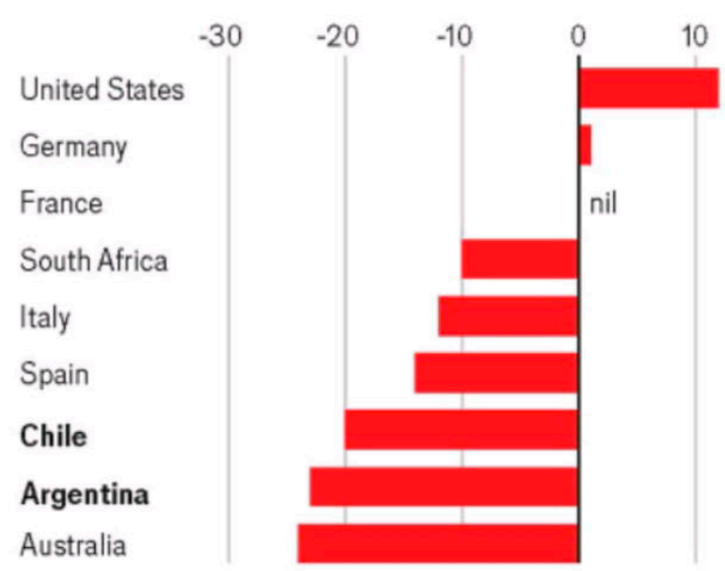
Average air temperature anomalies, °C
Jan 2024 deviation from 1981-2000 average



Argentine and Chilean wine regions*
Average SPEI-12†



Wine production, 2023, % change on a year earlier



*Approximate †Standardised precipitation evapotranspiration index
Sources: Copernicus, ERA5; International Organisation of Vine and Wine; SPEI Global Drought Monitor; *The Economist*

Canadian politics

A house divided

OTTAWA

Justin Trudeau is beset by a divided party and an angry electorate

"MY JOB IS not to be popular." Justin Trudeau, Canada's prime minister (pictured), spent much of March explaining himself as he fought a revolt against an increase to the country's carbon tax. On his own terms, and few others, Mr Trudeau is succeeding. Both his Liberal Party and the tax—which increased from C$65 to C$80 ($59) per tonne of CO_2 equivalent on April 1st—are unloved. Mr Trudeau survived a no-confidence vote ahead of the increase, but the debate it sparked has added to the burdens of a prime minister who is staggering through his ninth year in power.

The cost of housing is rising fast. Canadians, in particular young ones, are increasingly unhappy relative to the rest of the world. The left of Mr Trudeau's coalition is rebelling against his government's stance on the conflict in Gaza. The popularity of his rival, Pierre Poilievre, is growing—the Conservative Party has enjoyed a double-digit lead in voter intention surveys for several months (see chart).

Canadians used to be among the most contented citizens on the planet. The most recent World Happiness Report, based on data gathered by Gallup, a polling firm, suggests they are now the world's 15th-happiest people, having been the 6th-happiest before Mr Trudeau took office.

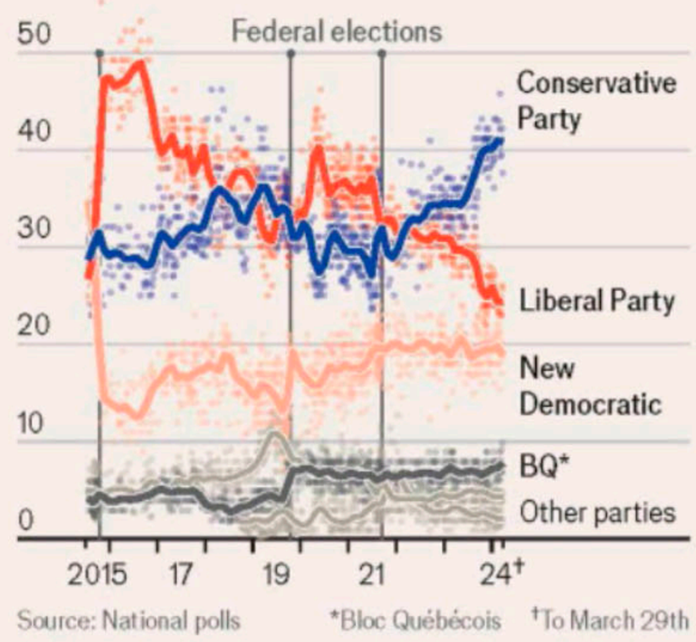
A closer look reveals a gap between satisfied seniors and those under 30, who are wretched. Young Canadians are the world's 58th-happiest, just ahead of youth in Ecuador, a country racked by gang violence. The divide is between those who own housing and those who can only dream of doing so. Younger voters, who helped Mr Trudeau leapfrog to power in 2015, vote on issues now, not leader image, says David Coletto, a pollster. Affordable housing is the issue that preoccupies them.

When Mr Trudeau took office, a household earning the median income could cover the costs of owning an average home by spending 39% of their pay, according to RBC, a bank. Now that figure is 64%. Soaring interest rates and decades of sluggish housing construction are to blame. Mr Trudeau has promised a sop to renters in the forthcoming April 16th budget, a package of measures called a "renters' bill of rights" to be agreed with the provinces. It is designed to stem the flow of younger voters to Mr Poilievre's Conservatives.

Mr Trudeau has to contend with divisions within his own caucus, too. A former adviser, who was involved in developing the carbon tax, believes half of the Liberal cabinet did not support the recent increase. Liberal leaders in Newfoundland and Ontario joined those of Canada's other provinces in demanding that Mr Trudeau cancel the increase. The levy is scheduled to rise by $15 per tonne annually, until it reaches $170 a tonne in 2030.

A liberal slide

Canada, voting intention, %



Source: National polls *Bloc Québécois †To March 29th

Canada produces less than 2% of the world's greenhouse-gas emissions, but emits more carbon per person than any large country except the United States and Australia. It has struggled to meet its emissions-reduction targets for years. Mr Trudeau has called the tax a necessary step in changing consumer behaviour to help save the planet. And besides, he says, the tax has been part of his platform for the past three elections, each of which he has won. "Well, he shouldn't be afraid to have one more," Mr Poilievre shot back.

Eventually he will have to. An election isn't expected until October 2025. But with polls putting the opposition to increasing the tax at close to 80%, more time seems unlikely to benefit Mr Trudeau.

And if division on matters domestic weren't enough, the prime minister is barely managing to bridge a different schism, over the war in Gaza. He has had to quell several angry exchanges among his Liberal MPs over Canada's role in the conflict. The New Democratic Party—a small leftist ally that has agreed to support Mr Trudeau's minority liberals until October 2025—submitted a motion calling for a ceasefire and the recognition of a Palestinian state. Had it gone ahead, it would have laid bare a split among Liberal MPs.

More than half of Mr Trudeau's caucus supported the motion before it was watered down and passed without reference to a Palestinian state, according to the *Globe and Mail*, a newspaper. That avoided an embarrassing display of foreign-policy incoherence. But three Liberals broke with the party to vote against the motion, and many didn't show up for the vote at all.

Most democratic leaders administer bitter medicine early in their mandates. They hope that positive results during their time in office will allow spent political capital to be replenished. Mr Trudeau is finding out how difficult it is to rally a divided country while doling out bitter pills with little popular support—as the moment at which he must seek a fourth mandate draws nearer. ■

The nine-year stare

Asia

India's elite

The Modi paradox

MUMBAI

Unlike other strongmen, his support among the educated elite runs deep

NARENDRA MODI, India's prime minister, is often lumped together with right-wing populists such as Donald Trump or Viktor Orban. On the surface, the comparison is plausible. In 2019 Mr Modi told the *Indian Express*, a newspaper, that his electoral success was not due to "the Khan Market gang or Lutyens Delhi", monikers for India's old establishment. Rather, said Mr Modi, he pulled himself up through "45 years of toil". But the prime minister, who is expected to win a third term after India goes to the polls later this month, is no ordinary strongman.

In most places support for anti-establishment populists, such as Mr Trump, and policies such as Brexit tends to be inversely correlated with university education. Not in India. Call it the Modi paradox. It helps explain why he is the most popular leader of any major democracy today.

A study in 2020 of Britain, Turkey, eight countries in the European Union and five in Latin America by Cristóbal Rovira and Steven van Hauwaert, two political scientists, confirmed the inverse relationship between higher education and support for populist leaders. It is not universal: Jair Bolsonaro, Brazil's president from 2019 to 2022, was backed by some of the best-educated elites. But in America it is strong. In December 2023 Gallup, a pollster, found that just 26% of respondents with a university education approved of Mr Trump, compared with 50% of those without.

Mr Modi bucks this trend altogether (see chart on next page). In 2017, 66% of Indians who had no more than a primary-school education told Pew Research that they had a "very favourable" view of Mr Modi. The number rose to 80% among Indians with at least some higher education. After the previous general election, in 2019, Lokniti-CSDS, a pollster, found that around 42% of Indians with a degree supported Mr Modi's Bharatiya Janata Party (BJP), while around 35% of those with only a primary-school education did. Polls conducted after state elections in 2023, such as in Karnataka, confirm the trend. Similarly Pew's latest survey, from last year, shows that 60% of university-educated Indians have a very favourable opinion of Mr Modi, compared with 55% of those who do not have a degree.

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A psephological puzzle

Mr Modi's success among the well-educated does not come at the expense of support among other groups. Indeed, like other populist leaders, his biggest inroads have been made among lower-class voters, says Neelanjan Sircar, a political scientist at the Centre for Policy Research, a think-tank in Delhi. In 2020 Sanjay Kumar of the Centre for the Study of Developing Societies found that between 2014 and 2019 support for the BJP increased among rural, lower-caste, young and poor voters. It grew especially quickly among "other backward classes", which make up nearly half of the population. Among them, the BJP's support rose from 34% to 44%, compared with an increase of 31% to 38% among all voters.

This pattern of support for the BJP is comparable to other countries in which ▸▸

less-educated or rural people have shifted right. But unlike many of his counterparts abroad, Mr Modi has also been able to increase his support among the educated. Three factors—class politics, economics, and elite admiration for strongman rule—help explain why.

In India, class is intertwined with the caste system. The BJP, like many conservative parties, is known to be business-friendly. A core constituency includes much of the "Bania" trader community, a traditionally business-oriented group concentrated in states such as Gujarat and Rajasthan. Tycoons such as Mukesh Ambani and Gautam Adani, India's richest men, fall into this group. Upper-caste Hindus, including Kshatriyas and Brahmins, are also part of the core support base. Some regional parties, such as the DMK in Tamil Nadu, have positioned themselves against such upper-caste groups. Congress, the main national opposition party, has championed preferential access to education and government jobs for lower castes.

Bigger, better...strongman?

Mr Modi, himself from a relatively low caste, has marketed the BJP as a caste-agnostic "pan-Hindu" party. This means he retains support from high-caste groups while extending the party's reach to others. Mr Sircar notes that the well-educated professional class across India broadly does not identify with the bureaucrats and media types in Delhi. So Mr Modi's antipathy to the capital's elite has not cost him support among others elsewhere.

The second factor is economic. Annual GDP growth was 8.4% in the last quarter of 2023 (though because of quirks in how India measures its GDP, the underlying figure is closer to 6.5%). That growth, albeit unequally distributed, is driving a rapid increase in the size and wealth of the Indian upper-middle class. Goldman Sachs, a bank, has called this phenomenon the rise of "affluent India". It calculates that the number of Indians with an annual income of $10,000 or more grew from 20m in 2011 to 60m in 2023, and will hit 100m by 2027.

It is not surprising that Mr Modi has retained the support of those who have become richer. The Congress party enjoyed strong support among the upper-middle class during the fast-growing late 2000s. It took a slowdown and a series of corruption scandals in the 2010s to change things.

But Mr Modi's tenure has increased India's economic and geopolitical standing in the world, too. One fund manager in Mumbai says that her friends worried about perceptions of India when Mr Modi was elected prime minister. He was chief minister of Gujarat during a bloody riot against Muslims there in 2002, an incident that saw him denied a visa to America for nine years. She thought Mr Modi might become a global pariah. In fact, the opposite happened. Because of India's economic heft, and its importance as a counterweight to China, Mr Modi has been embraced by leaders worldwide.

Many university-educated Indians say they dislike Mr Modi's weaponisation of law enforcement against opposition parties and his government's treatment of Muslims as second-class citizens. The arrest on March 21st of Arvind Kejriwal, the chief minister of Delhi, amplified these concerns. Still, as a banker in Mumbai notes, there is a widespread sense that the good parts of Mr Modi outweigh the bad. Indeed, some think a dose of strongman rule is exactly what India needs.

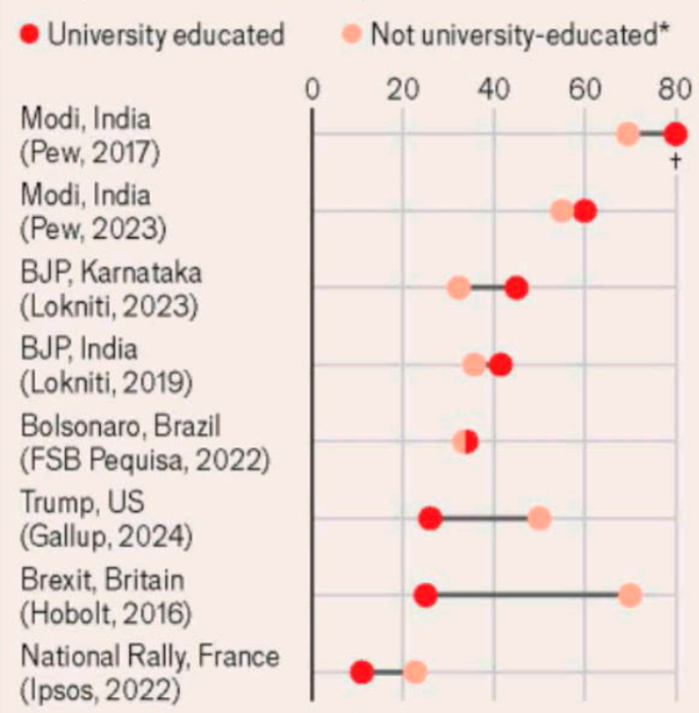
This is the third reason for the prime minister's popularity among elites. They point to China and the East Asian tigers, which they believe show that muscular governance can tear down barriers to economic growth. One industrialist in south India says that the country is "probably too democratic", given its level of income. Mr Modi, he adds, can "get shit done".

India's elites see Mr Modi's foreign policy as nationalist yet pragmatic. They like the way he thumbs his nose at liberal Western institutions and the media, in a similar fashion to other anti-globalist strongmen, while promoting Indian interests. Mr Modi has negotiated four new trade deals since 2021, most recently with a grouping of four non-EU European countries on March 10th. In February, at the Raisina Dialogue in Delhi—India's version of the Munich Security Conference—his ministers lamented the UN's antiquated structure, while also positioning India as the leader of the global south.

Admiration for leaders perceived as decisive is not new among India's elite. In the 1970s J.R.D. Tata, one of the country's most prominent industrialists, is said to have appreciated Indira Gandhi's imposition of "the Emergency", a two-year-long suspension of normal democratic processes in response to a perceived threat to her power. A survey by Pew published in February found that 67% of Indians thought that "a system in which a strong leader can make decisions without interference from parliament or courts would be a good way of governing their country". That figure, up from 55% in 2017, was the highest among the 24 countries surveyed. Many internationally minded Indians say Mr Trump is too autocratic for America, but that Mr Modi is the right man for their country.

Bucking the trend

Support for right-wing populist candidate, party or issue, % of those polled



*Mean of multiple non-university brackets calculated where applicable †Includes some with college level but not a university degree

Sources: FSB Pequisa; Gallup; Lokniti; Pew Research; "The Brexit vote: A divided nation, a divided continent", by S.B. Hobolt, *Journal of European Public Policy*, 2016

Making India great again

So what could shake Mr Modi's elite fan base? Continued weaponisation of the state, as in the case of Mr Kejriwal, could come back to bite him; most elites still say they believe in democracy. And many of the people who say they like the prime minister also fear him, including those in business who know their survival depends on remaining in his good graces. Some have tempered their support. Pew's survey in 2023 found that 17% of college-educated respondents had an unfavourable view of Mr Modi, up from 5% in 2017.

Others are voting with their feet: according to Henley and Partners, a consultancy, India had a net outflow of 14,000 millionaires in 2022 and 2023, more than any country among those measured bar China, including Russia. By contrast Australia, Singapore and the UAE, and eight other countries, attracted over 1,000 millionaires each in net inflows—reflecting, perhaps, their more predictable rule of law.

But for those who stay, even intensified autocracy may not be enough to lose Mr Modi many votes. In 2019 India's economy, reeling from a mini-financial crisis, slowed to a growth rate of 4%. While this weakness was not entirely Mr Modi's fault, his impulsive decision to swiftly demonetise large banknotes in 2016 had not helped. Elites complained, but apparently felt that Mr Modi was better for their wallets than the opposition, and voted for him.

This is why many say that support for Mr Modi will continue until a credible alternative appears. Most elites have lost faith in Congress and its leader, Rahul Gandhi, who is seen as dynastic and out of touch. One senior Congress official even admits that Mr Modi "has taken our best ideas", such as distributing welfare payments digitally, and "executed them better" than his party could have done. A stronger opposition is probably the only thing that will cause India's elites to abandon Mr Modi. For now, however, that is nowhere in sight. ■

Disaster resilience

Japan builds back

SUZU AND WAJIMA

The recovery from the Noto peninsula earthquake will take years

FISHING BOOTS. Their son's beloved fishing boots—that is what Hamazuka Hiroyuki and Chiaki most hope to find under the rubble of their garage. The Hamazukas' place in Suzu, on the northern tip of Japan's Noto peninsula, is one of nearly 100,000 buildings that were damaged or destroyed when a massive earthquake struck on January 1st. As of late March the death toll had reached 244 people. The Hamazukas and their children survived, but like most of their neighbours, nearly 100 days after the tremor, the family is only beginning to piece its life back together.

The peninsula will take years to recover, says Fujino Tatsuo, a disaster-relief volunteer. The lessons it offers are pertinent for the earthquake-prone area around the Pacific Ocean known as the "ring of fire"—as seen on March 3rd, when Taiwan was hit by an earthquake of magnitude 7.4, its strongest in over two decades.

In Noto, the shaking began around 4pm on New Year's Day. "The sea looked black, and it was swirling," Mr Hamazuka recalls. With a magnitude of 7.6 the quake was the strongest to hit the country since the Great East Japan earthquake of 2011, which triggered a massive tsunami and precipitated the nuclear meltdown at Fukushima. The seismic activity in Noto initiated a process known as "liquefaction", wherein normally solid ground turns into a liquid-like substance. In Wajima, the peninsula's main city, a fire broke out at a market, leaving a wasteland behind.

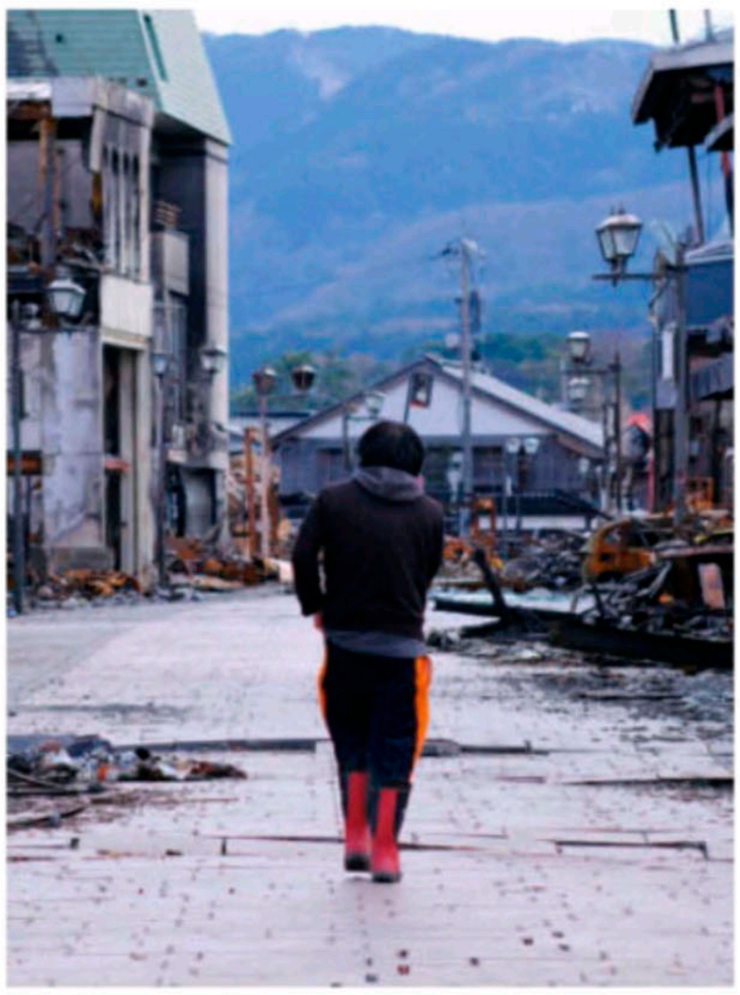
Across Noto, the wreckage is widespread. Although newer structures survived, many traditional wooden houses were flattened. Nearly 10,000 people are still displaced. Residents strive to maintain their dignity. At one evacuation centre in Wajima a group of women whisk green tea and arrange sweets on lacquer trays, the town's signature craft. Yet grief and shock are never far below the surface.

The damage in Noto might have been worse, had it not been for Japan's attention to disaster risk and a bit of good luck. The quake struck a peninsula that is home to a small fraction of the country's population and accounts for a minor share of its GDP. The government estimates that the damage will amount to around ¥2.6trn ($17bn), a manageable amount compared even with the cost of another big quake in 2016 in Kumamoto, a mid-sized southern city, which did ¥5trn worth of damage. (Feared tremors in Tokyo or central Japan would cause far more.) Though the government issued a major tsunami warning, the waves turned out to be smaller than expected. Residents largely heeded calls to evacuate.

Yet each earthquake in Japan is a lesson for future disasters. The remoteness of the Noto peninsula has complicated rescue and recovery efforts. Roads leading to Kanazawa, the regional capital, were destroyed, and for weeks after the quake a drive that had normally taken two hours took up to nine. Ports were damaged, while bad winter weather grounded helicopters.

The Noto peninsula is also at the edge of Japan's demographic transition. The region is one of the oldest, with nearly half of the population older than 65, compared with around 30% nationally. Elderly residents are especially vulnerable during disasters. But it is not only Japan's population that is ageing—its infrastructure is, too. Water pipes laid during Japan's postwar boom are reaching the end of their useful lives, but utilities lack funds to invest in upgrades. Depopulation is eating into their profits. In Noto as many as 135,000 households were left without water. Flush toilets are still hard to come by. Volunteers set up makeshift facilities. "People cried when they took baths for the first time," recalls Kamikawa Tetsuya of VNet, a non-profit.

New technology may be able to help. At evacuation centres across the peninsula residents can wash using special sink and bath units that self-recycle water, courtesy of Wota, a Japanese startup that produces decentralised water-treatment infrastructure. Drones were deployed to help ferry supplies to hard-to-reach coastal communities. Digital ID cards have made it easier to track those in need—officials hope the disaster will encourage their use. "We want to make the region more resilient, not just lay more concrete," says Nishigaki Atsuko, vice-governor of Ishikawa prefecture, which includes the Noto peninsula.



The long road back

Yet the recovery is sure to be protracted. "It feels almost endless," one official in Wajima says. Merely clearing away debris is projected to take until early 2026; the disaster waste is expected to amount to some 2.4m tonnes, equivalent to roughly seven years of the prefecture's rubbish. Officials hope to have displaced people back at home within four years, but in reality it may take much longer, or not happen at all.

The main long-term risk is accelerated population decline, reckons Karashima Yuraki of the Peace Boat Disaster Relief Volunteer Centre, a non-profit: "How many people will actually come back?" As Japan knows all too well, disasters continue long after the shaking stops. ■

Sport in India

In a different league

MUMBAI

Can kabaddi conquer cricket?

WALK INTO any room in India with a screen from now until the end of May and you will find yourself watching the Indian Premier League (IPL), a wildly popular cricket tournament that is by some measures the world's most lucrative sports league after America's National Football League. Until a few days before it started, late last month, the same screens would have been showing the Women's Premier League (WPL), IPL's women's counterpart. Early March also saw the inaugural season of the Indian Street Premier League—cricket played with a yellow tennis ball.

It is a truism that Indians are obsessed with cricket. Yet the success of IPL has had the unlikely effect of spurring an efflorescence of domestic leagues in other sports, too. Over the past decade leagues modelled on IPL have emerged in hockey, tennis, badminton, football and handball, along with indigenous games such as kho kho and kabaddi. Some, notably kabaddi, have even been commercially successful. A cricket-mad country is diversifying.

Cricket took 87% of every rupee spent on sports advertising, sponsorship and endorsements last year, according to GroupM ESP, a marketing agency. But that was down—a smidge—from 88% in 2021 (see chart). "The pie for non-cricket sport is going to grow," says Divyanshu Singh of JSW Sports, which owns teams in IPL, WPL, Pro Kabaddi League and the Indian Super League, a football tournament. ▸▸

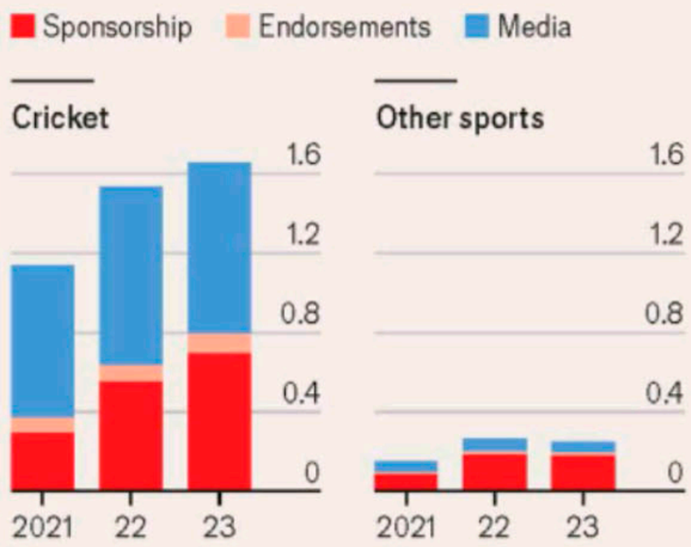
As in any other boom, not all ventures will succeed. Some leagues have already folded. Yet the culprit is not the dominance of cricket but a range of internal factors. For a new league to attract viewers it must offer the very best talent in that particular sport, says Sanjeev Tripathi of the Indian Institute of Management in Indore. With global sports available on television and streaming, the difference in quality between, for example, Indian and American basketball leagues is apparent. Kabaddi's success can in part be attributed to the league offering the highest quality of play available in that sport.

Moreover, leagues tend to succeed only in team sports. It is hard to build up loyalty for artificial teams in player-driven sports such as tennis and badminton. Any new league must also be well governed and offer its backers a decent chance of recouping their investment. That means setting sensible caps on player salaries, keeping costs down and investing in high production standards, says Anupam Goswami, commissioner of the Pro Kabaddi League. As with the quality of play, viewers accustomed to global sports are turned off by amateurish production. Another crucial reason for non-cricket sports to succeed in India, says Mr Singh, is success itself: "As a TV-viewing audience, we are not such fans of sport. We are fans of superstars."

Yet the most important factor in sustaining the sports boom is one where progress remains slow. Though Indian viewers are happy to watch sports, rates of physical activity are low. A recent survey by YouGov, a pollster, found that while 57% of respondents described themselves as fans of cricket, only 31% had actually played the game in the previous year. Rates for other sports are even lower. Three-quarters of Indian adolescents are physically inactive, according to the UN's World Health Organisation. "The younger generation has never played these sports," says Jinisha Sharma of Capri Sports, which owns cricket, kabaddi and kho kho teams. "How do you keep finding newer talent?" ■

Playing the field

India, sports industry spending, $bn



Source: GroupM ESP

Asian dynasties

Meet the political "nepo babies"

MANILA AND SINGAPORE

They are holding back growth

IF POLITICS IN Asia shows anything, it is that family matters. In the Philippines three of the four most recent presidents were the children of past ones. In Cambodia Hun Sen, the strongman who has ruled since 1985, recently passed on the prime ministership to his son, Hun Manet. North Korea has only ever known three generations of the same ruling family. Most families are bent on staying in power.

Political dynasties are not new. Nor can Asia claim a monopoly on them. They have shaped nearly every continent. Yet it is hard to think of an Asian country unsullied by them. Nowhere else is the case so assiduously cultivated by dynasts and their fans that power passed down by families is the best guarantor of social peace and spreading prosperity. This profoundly mistaken claim has egregious effects on the region's economies and their ability to grow.

Indeed, "nepo babies" are consolidating power. In January Sheikh Hasina, daughter of Bangladesh's founding father, Sheikh Mujibur Rahman, secured her re-election as prime minister, in part by hounding the opposition—her long-time enemy, Khaleda Zia, head of a rival clan, languishes under house arrest. (She insists the vote was free and fair.) In Pakistan in February the Sharifs and the Bhutto-Zardaris, two rival political dynasties who have historically alternated in power, in effect joined forces, with the powerful army's backing, to keep out a non-dynast, Imran Khan, in the election.

Indonesia's presidential election, also in February, saw a family alliance triumph. Prabowo Subianto, a general under the late Suharto's dictatorship and the former husband of Suharto's daughter, won the presidency. He chose the son of Jokowi, the popular outgoing president, as his running-mate. (In 2014 Jokowi insisted that becoming president "does not mean channelling power to my own children".)

Alliances, of course, can also fracture. President Ferdinand "Bongbong" Marcos is the son of a former president, also Ferdinand, who turned dictator before being deposed in a popular revolution in 1986. His vice-president, Sara Duterte, is the daughter of the previous president. The uneasy alliance that brought them to power in 2022 has since turned to open feuding.

History plays its part in making Asia prone to dynastic rule. In the Philippines many political families date back to colonialism. Upon independence rich families snapped up land that poor Filipinos could not afford. Clans, the Marcoses among them, developed vast *haciendas*. Four presidents since 2001 have come from these landowning classes. Ronald Mendoza of Ateneo de Manila University calculates that 78% of the country's governors, 73% of congressmen and 57% of mayors are from families boasting more than one member holding an elected position.

Land ownership also plays a part in the ▸▸

prominence of political families in Pakistan and Bangladesh. In India, by contrast, dynasties are products of post-independence democratic elites. This is especially the case with the Nehru-Gandhi family, which has produced three prime ministers, starting with the first, Jawaharlal Nehru. His great-grandson, Rahul Gandhi, runs Congress, the main opposition party (though he looks likely to be thrashed in India's upcoming election, see main story).

The effects of nepotism can be profound, as seen in crushingly poor North Korea. In the Philippines work by Mr Mendoza and others shows that in the country's more prosperous regions, such as Luzon in the north, political families encourage economic development, but also expand their wealth and clout. The limits of reform are reached when their interests and those of their cronies are at risk. Mr Mendoza's paper calls these dynastic politicians "stationary bandits".

As for Pakistan, a paper by Ayesha Ali of the Lahore University of Management Sciences highlights how, after disastrous national floods in 2010, development spending was over a tenth lower than the average in those constituencies run by political dynasts. In India, dynastic rule lowers the growth in light visible at night—a proxy for economic activity—by 6.6 percentage points per year, according to a paper by Siddhart Eapen George and Dominic Ponattu. In order to shine, Asia needs to dump its dynasts. ■

BANYAN

Consider the Konbini

Convenience stores offer a window onto Japan's multicultural future

TO UNDERSTAND HOW Japan is changing, consider the 7-Eleven convenience store in Minami-Azabu 1-chome, in central Tokyo. At first glance, it appears to be like any other *konbini*, as such shops are known locally—a paragon of impeccable Japanese service culture. Clerks shout "Irasshaimase", a greeting to customers, each time the doors open. Rows of neatly arranged seasonal snacks fill the shelves and the scent of freshly fried chicken wafts through the air. Yet all the staff are Burmese, including the owner, May Zin Chit, the first person from Myanmar to own a Japanese 7-Eleven franchise.

Konbini are the lifeblood of modern Japan. Since emerging in 1969, they have outgrown their American antecedents, becoming an essential part of the country's social infrastructure—and a $77bn-a-year industry. The four main chains—7-Eleven, FamilyMart, Lawson and MiniStop—boast a total of 55,700 branches, dotted across every city and town; last year they served a combined 16bn customers. Japanese rely on them as places to buy fresh food, pay bills, pick up sumo tickets, send parcels, and much more, 24 hours a day. Foreign tourists marvel at the range of their offerings; famous international chefs praise their egg sandwiches.

Yet there are ever fewer Japanese to make the *konbini* magic happen. Japan's working-age population peaked at 87m in 1995 and is projected to fall to 55m by 2050. Bringing more women and elderly Japanese into the workforce can help counteract the trend, but only to a limited extent. Japanese politicians are loth to say it out loud, but immigration is also part of the answer—as Ms May's journey up the *konbini* ladder demonstrates.

Ms May first came to Japan as an exchange student. When she began working at 7-Eleven in 2008, there were just 500,000 foreign workers in Japan. People would stare at her. Customers often asked to speak with Japanese staff.

While avoiding talk of an official "immigration policy", the Japanese government has quietly opened the door for more foreigners to enter the country in recent years. The number of foreign workers has quadrupled since 2008, reaching the 2m mark for the first time last year. (Another 1.2m foreigners live in Japan, but do not officially work.) On March 29th the government expanded the list of fields eligible for skilled-worker visas.

The number will have to rise faster. Japan needs 4.2m foreign workers by 2030 to sustain even its modest GDP growth targets. Though wariness about large-scale immigration is still widespread, the labour crunch has convinced many business leaders and officials of the necessity of a more multicultural Japan. Foreigners make up roughly 2.5% of Japan's population today, but according to the government's own projections, the ratio will exceed 10% by 2070, similar to current levels in France. As Yasui Makoto, who leads efforts on multicultural coexistence at 7-Eleven, notes, that era falls within the lifetime of today's children.

Inside Japan's *konbini* that era has already arrived. Some 80,000 foreigners work in the industry, accounting for 9% of the workforce; in many big cities, half of 7-Eleven staff are foreigners. (Many of them are students.) At Ms May's shop, she seeks to "provide a Japanese level of service", stressing to staff the importance of the "little details", such as how to bag products and not squish them.

At 7-Eleven, Ms May is held up as a model the company hopes to replicate. Yet too many roadblocks remain for others to follow in her path. Many of the students who work at *konbini* struggle to get visas to continue working there after graduation. Relatively few rise to the level of store manager, much less an owner. Ms May had to secure permanent residence, an arduous process, and a line of credit in order to achieve her dream of owning a shop. For all the government's tweaks to the migration rules, it is still far too difficult for prospective migrants to put down roots in Japan.

Ms May, for her part, hopes to stay in the country for good. She is raising two young children, who speak Burmese at home and Japanese at school. "Now that I have a family here, Japan feels like home," she says. Like many native-born Japanese, she enjoys travelling to *onsen* (hot springs) and has a favourite *konbini* snack of her own: *gyu meshi*, a rice bowl topped with stewed beef. Becoming a store manager gave her confidence. "It made me think that it doesn't matter if I'm a foreigner, as long as I work hard," she says. Japan, slowly but surely, may be learning the same lesson.

China

The power of princelings

Red hearts and coronets

Xi Jinping has curbed the clout of China's political clans, but they might yet determine the country's future

CHINA'S PROPAGANDA chiefs are eager to show that Xi Jinping, the country's leader, belongs to the red aristocracy. They pump out books and documentaries about his late father, Xi Zhongxun (pictured, left), who was a comrade-in-arms of Mao Zedong. Once a year, when state television shows Mr Xi delivering new year's greetings from what purports to be his desk, his father's picture is clearly visible on a bookshelf behind him. The message is clear: Mr Xi's bloodline is impeccable.

When Mr Xi came to power in 2012, many observers described it as a symbol of the rise of "princelings", a term often applied to descendants of the most senior revolutionaries who fought with Mao, as well as the offspring (and their spouses) of those who served as senior officials in Beijing after the Communists came to power in 1949. Mr Xi became one of four members of the party's most powerful body, the seven-member Politburo Standing Committee, who could be described as princelings. Never had it been so stacked with them.

At the highest levels of politics, things look very different today. After a reshuffle in 2022, Mr Xi became the only princeling in the Standing Committee. He appears not to want to share power with others whose pedigrees could challenge his own.

But princelings might yet determine China's future. They still permeate the management of state-owned enterprises (SOEs) and financial firms, as well as the armed forces' officer class. In these institutions, family connections matter. Power is transmitted through formal mechanisms, yet its origins are often hazier, involving networks tied to bloodlines. This has big implications. When Mr Xi leaves the political scene, red families will have the wealth, prestige and military ties that could enable them to shape what comes after. The next ruler may not be a princeling, but the clans may be kingmakers.

To understand all this, one must look at the way politics evolved following Mao's death in 1976. After Deng Xiaoping introduced market reforms in the late 1970s, many princelings went into business. Having experienced the vicious politics of the Mao era, they saw this as a safer option. But Deng and his colleagues wanted to keep the party in the hands of people like themselves, so they picked a few of their offspring to groom as potential leaders. Mr Xi was one of them. He began a long and unremarkable career in the provinces.

When the opportunity eventually came for a handover of power to princelings, Mr Xi faced little competition from others of his pedigree. The most notable exception was Bo Xilai, the suave and charismatic party chief of the south-western region of Chongqing. Mr Bo is the son of Bo Yibo, one of several revolutionary veterans who, along with Deng, wielded enormous influence from the late 1970s and whose clans today are foremost among the red families. (Most, including Deng, had died by the late 1990s, though Mr Xi's father lived until 2002 and Mr Bo's until 2007.) In Chongqing Mr Bo deviated from the low-profile ▸▸

→ ALSO IN THIS SECTION

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norm of provincial leaders by waging a sweeping campaign against corruption and whipping up nostalgia for the egalitarian Mao years. His populist style attracted many supporters.

But Mr Bo's political ambitions were scuppered by the flight of his police chief to an American consulate, where he revealed that Mr Bo's wife had murdered a British businessman. Mr Bo was arrested a few months before Mr Xi took over. Mr Xi eventually had him jailed for life for bribe-taking and other misdeeds. He later accused Mr Bo of planning to "seize power". Mr Bo is now thought to be in Qincheng prison on Beijing's northern outskirts, the usual place of incarceration for casualties of high-level struggles. He enjoys special treatment there. According to the *South China Morning Post*, a newspaper in Hong Kong, he is allowed to wear a Western suit.

To consolidate his power, Mr Xi leant heavily on one of his fellow princelings on the Standing Committee: Wang Qishan, the son-in-law of Yao Yilin (Yao was on the Standing Committee during Deng's rule). On Mr Xi's behalf, Mr Wang masterminded a war on corruption that toppled hundreds of senior officials and military commanders, thereby crushing any potential opposition to the new ruler.

Mr Wang stepped down from the Standing Committee in 2017, but the purges continue. One of those felled last year was a red aristocrat: General Li Shangfu was sacked as defence minister a few months after taking up the job. General Li's father was a revolutionary who became a high-ranking officer under Mao. His alleged offences have not been revealed.

Stick to business

For now, General Li remains on the Central Committee, a body comprising about 370 members of the party elite, from ministers and provincial leaders to SOE bosses and military brass. But he is likely to be booted out when it next meets, probably this year. That would leave only nine members of the group who are princelings, reckons Cheng Li of the University of Hong Kong. When Mr Xi became the party's boss the Central Committee had 41 of them (see chart).

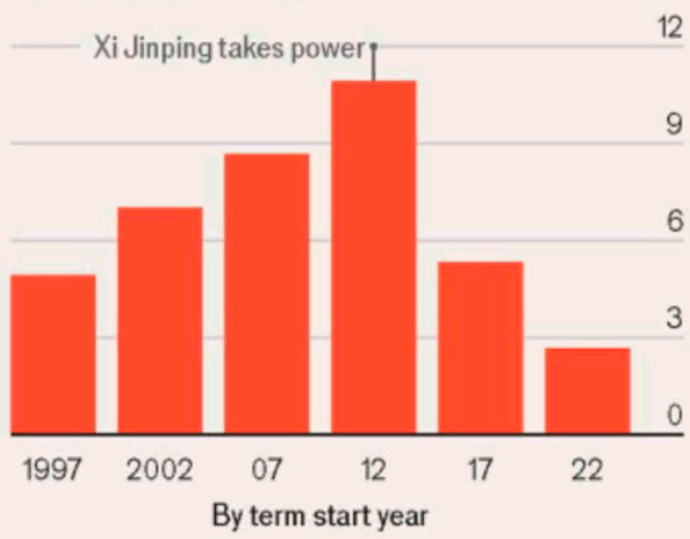
In business it is a different story. In the build-up to Mr Xi's accession, Western media uncovered sensational details of the riches accumulated by family members of some of China's most powerful people. Investigations by the *New York Times* revealed that relatives of current and former senior officials had "amassed vast wealth, often playing central roles in businesses closely entwined with the state, including those involved in finance, energy, domestic security, telecommunications and entertainment". Bloomberg, an American news service, focused on Mr Xi's relatives, linking them to hundreds of millions of dollars in assets (it said none was traced to Mr Xi, adding that it had found no indication of any wrongdoing by Mr Xi or his family).

Officials reacted furiously to the reports. They retaliated by blocking visa applications from these news organisations. In 2019 the Chinese foreign ministry refused to renew the press credentials of a Singaporean reporter for the *Wall Street Journal*, Chun Han Wong, forcing him to leave the country. Mr Wong had written about an organised-crime investigation by Australia's authorities that touched on the activities of a businessman who is a cousin of Mr Xi and has become a naturalised Australian citizen. (The article said there was no evidence that Mr Xi knew about the man's business and gambling affairs.) According to the paper, ministry officials urged it not to publish the article, warning of unspecified consequences.

In 2014 the *New York Times* reported that Mr Xi had been pushing family members to sell hundreds of millions of dollars in investments. They included stakes in mining and property firms held by his sister, Qi Qiaoqiao, and brother-in-law, Deng Jiagui. But Mr Xi's anti-corruption campaign has had little impact on the dealings of political families, says Desmond Shum, a Chinese businessman who moved to Britain in 2015. "Maybe it's more subtle than it used to be. It's not so in-your-face," he says. But he calls cashing in on the family name "a baked-in feature" of princeling life.

Less central

China, % of princelings* in the Central Committee



*Family members of deputy minister/deputy governor or higher rank
Sources: Cheng Li, University of Hong Kong; China Data Lab; news reports

Mr Shum is rare as someone who is both a close-up witness of how these dealings work and who is willing to talk openly about them. He is the ex-husband of Whitney Duan, also known as Duan Weihong, who became a close friend of Zhang Beili, a businesswoman and jewellery expert who is the wife of Wen Jiabao, the former prime minister. Mr Shum and Ms Duan helped to arrange some of Ms Zhang's deals. (In an exposé of this, "Red Roulette", published in 2021, Mr Shum wrote that they had always been careful "to stay within the boundaries of the law".)

Few princelings have been arrested in the anti-corruption drive. Mr Shum says one reason is Mr Xi's feeling of kinship with them: "It's a web," he says. "They are people who worked with your father, they are the children of your father's colleagues, your father's underlings. They grew up with you." For Mr Xi to send princelings to prison, other than those who pose a political threat, would "almost go against his upbringing", Mr Shum believes. Mr Xi's rise "was really with the support of that group".

Mr Xi has made it much harder to trace the princelings' business connections. As Shanghai correspondent of the *New York Times* between 2004 and 2015, David Barboza played a big role in exposing these networks. He later co-founded The Wire Digital, a China-focused news and data platform based in New York. Mr Barboza

doesn't think any journalist could obtain the kind of detailed company records that he could get access to when working in China, with owners' signatures, addresses, ID-card details and phone numbers. These records were on paper, and the authorities have clamped down on access to them. "Even companies have a hard time getting the paper records," Mr Barboza says.

Details of Chinese company ownership are still available from online databases (Mr Barboza's firm maintains one, called WireScreen, that flags people known to be politically connected). But those provided by Chinese firms contain far fewer of the clues that Mr Barboza was able to glean from the records he used. He believes that the princelings are still doing big deals, however. "I don't think it's changed dramatically, except in this sense: everyone is afraid of Xi Jinping. And people are either trying to figure out how to hide their money better, or move it offshore."

Comrades up in arms

Mr Xi does not reject the idea that bloodlines matter. Far from it. He has dedicated his rule to revitalising the party and reviving its "revolutionary spirit". This has involved playing up the heroism and idealism of its founding fathers. At the party's celebrations in 2019 of 70 years of Communist rule, some of their descendants joined a massive parade through Tiananmen Square, sitting on open-top buses painted red and gold, waving portraits of their powerful ancestors (see picture on previous page). Prominent among them was Mao's grandson, Major General Mao Xinyu.

But Mr Xi's high-handed ways have angered at least some of the princelings who once backed him. Joseph Torigian, who is writing a book about Mr Xi's father, believes that many princelings are extremely dissatisfied with him. "They think that he has just completely shut them out," he says. Olivia Cheung of the School of Oriental and African Studies in London believes Mr Xi is mindful that the collapse of authoritarian regimes is often caused by fighting within the elite, rather than public protests. "I think Xi Jinping is quite alert to that. So keeping the princelings under control has to be a political priority."

To Mr Xi, it clearly is. The sentencing of Mr Bo was a dramatic example. But Mr Xi has also tried to stifle more liberal types. Such princelings were among backers of *Yanhuang Chunqiu*, a journal that explored the dark side of the Mao era and suggested greater political freedom. Its deputy publisher was Hu Dehua (pictured, right), a son of the former party chief, Hu Yaobang, whose death in 1989 triggered nationwide pro-democracy upheaval. At closed-door meetings organised by the publication, the princelings aired their views on the need for political reform—until officials purged the journal's leadership in 2016 (including Mr Hu) and replaced it with a new team in tune with Mr Xi's thinking.

Among the few to have defied Mr Xi openly is the retired chairman of a state-owned property company, Ren Zhiqiang (pictured, left). Mr Ren is the son of Ren Quansheng, who served under Mao. In 2020 he was sentenced to 18 years in prison for corruption and abuse of power. The real, unstated, reason was his tirades against Mr Xi. He was detained after calling him "a clown with no clothes on who is still determined to play emperor".

Other princelings support Mr Xi's efforts to stiffen the party's sinews, but they point to Mao's days as a time when China was supposedly fairer and more in tune with the needs of the working class (they are denialists of Maoist horrors). A clutch of neo-Maoist websites fawningly report on the activities of princelings sympathetic to their cause, such as their staging of events last year to mark the 130th anniversary of Mao's birth. Attendees included several of his descendants (among the political clans, Mao's is relatively marginal).

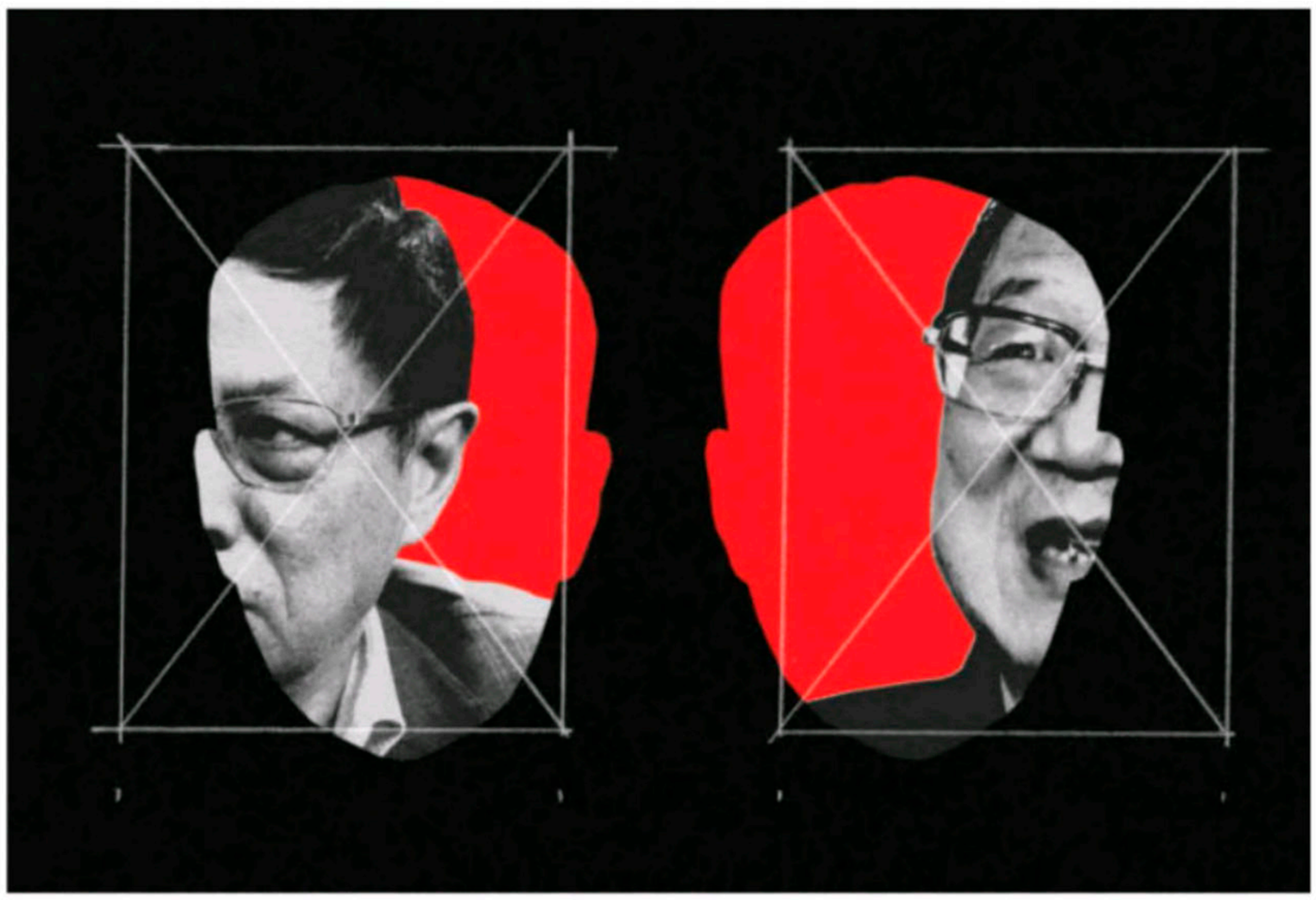
Just because Mr Xi has sidelined them, it would be a mistake to declare that princelings have no political future. There are three good reasons for keeping an eye on them. First, revolutionary families have been important since the beginning of Communist rule. Mao and Deng were both giants of the revolutionary era. Deng's immediate successors, Jiang Zemin and Hu Jintao, were not, but they were selected by him. Mr Xi's rule is seen by princelings as a resumption of the norm: rule by the red aristocracy after years of caretaker administration. If Mr Xi steps down, his successor is likely to be a puppet. When he dies, the aristocracy will expect a say in designing China's next political phase.

The second reason is that clans, unlike individual rivals, are impossible to wipe out. The princelings may have been pushed aside by Mr Xi, but their wealth gives them much potential influence.

To be sure, each new generation sees the world differently from their elders: the *hongsandai*, or third-generation reds, include some whose embrace of Western lifestyles would appal their ancestors. Check the Instagram account of @baobaowan. Its owner is a grand-daughter of the late Wan Li, a veteran of the revolution. "Delighted to receive the first Aston Martin DBX in China, in the very unique satin solar bronze color that I always loved," went a post in 2020. But Victor Shih of the University of California, San Diego, believes these families' views may still affect the outcome of a succession struggle. "They can play a very pivotal role," he says.

The third reason why princelings may prove important is simply their numbers. The system is "infested" with them, says Mr Shum. When succession looms, party structures will be involved in deciding the outcome. But, if the past is a guide, the new line-up will be decided by a broader swathe of the elite, with retired officials, especially those of good revolutionary genes, having a say. To protect their interests, these ex-leaders may feel safer with someone of their own blood in charge.

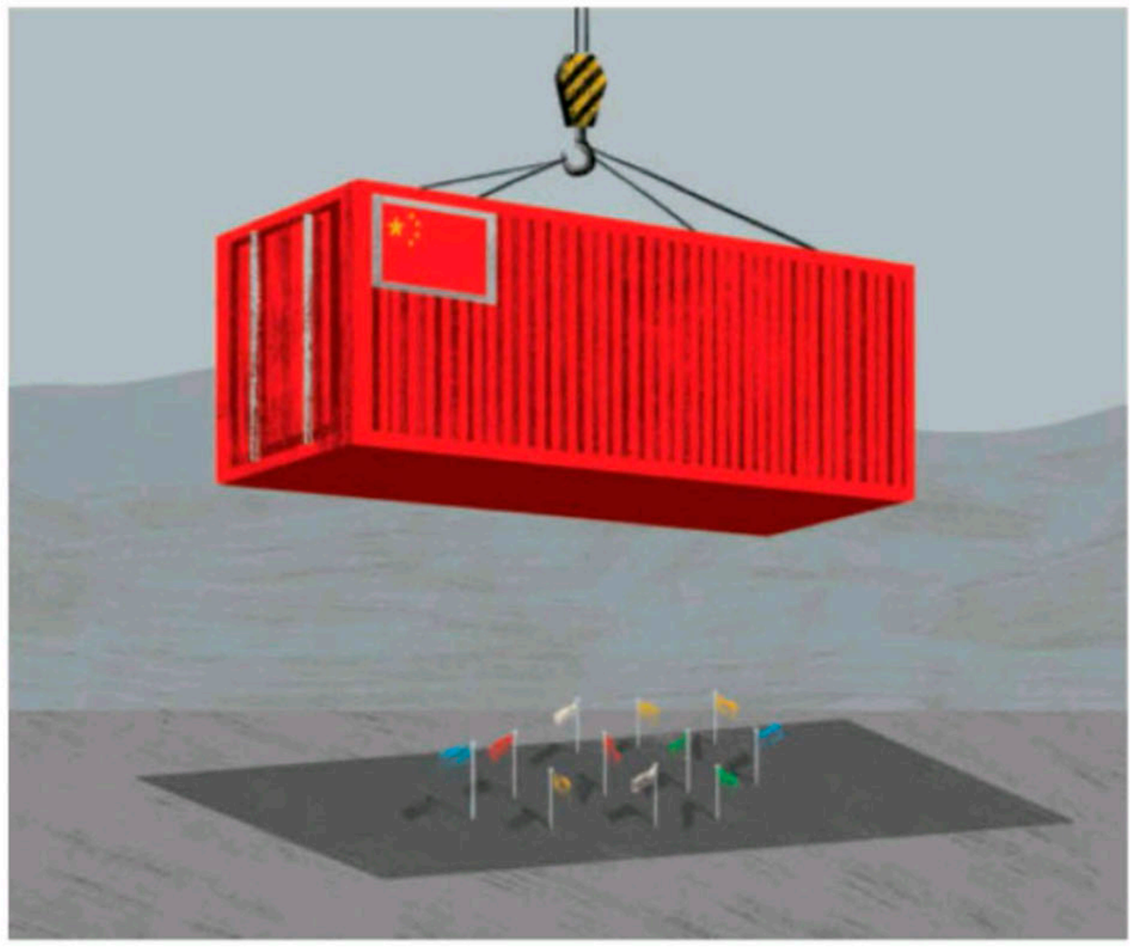
Indeed, that was the case in 2012, when they preferred Mr Xi (even if many came to resent him). China's leader has since worked hard to prevent the emergence of coalitions that might threaten his power. Officials are rotated more frequently. Efforts are made to keep them employed away from their home provinces. But clan links are harder to smash. One princeling currently towers above the others. He may not be the last of his kind. ■



CHAGUAN

China's tin-eared approach to the world

It wanted countries to focus on interests, not values. Careful what you wish for



FOR CHINA'S finest barbarian-handlers—an elite corps of diplomats, technocrats, trade envoys and foreign-policy scholars—this is a told-you-so moment. Such Chinese voices have spent years urging foreign governments, especially those with deep ties to America, to fuss less about democratic values and other fuzzy notions, and to focus on cold, hard national interests. Now, they argue, the times are proving them right.

In China's telling, America stands exposed as a hypocrite, quick to accuse China or Russia of breaking international law and abusing human rights, while supplying bombs used to kill civilians in Gaza. In Beijing it is said that Russia's invasion of Ukraine united the West, but Israel's conflict with Hamas is dividing it again. It is predicted that if Donald Trump is re-elected his allies will learn, once again, that this is a friendless world and that "America First" means what it says. In such a moment, wise foreign governments will stop pointing fingers at the flaws of other political systems or regimes, and concentrate on making their own citizens safe and prosperous. This advice is applied most particularly to relations with China. According to Chinese officials and scholars, shrewd foreign leaders should spurn American calls to join ideological blocs or defence alliances that are meant to contain China's rise. Instead, states should concentrate on striking bilateral, "win-win" deals with Chinese economic partners.

A mood of grim vindication suffuses many gatherings of China's foreign-policy establishment. Today, the logic of power guides international relations, it is said. There is evidence that others share that outlook, to China's benefit. A newly published poll of South-East Asian political, business and academic bigwigs, conducted by the ISEAS-Yusof Ishak Institute, a think-tank in Singapore, makes gloomy reading for American diplomats. Since the poll was last taken a year ago, respondents from ASEAN countries are less confident that America is a reliable partner and more sceptical of the international rules-based order. The conflict in Gaza plays a role: it is the most-cited geopolitical concern, especially in such majority-Muslim countries as Indonesia or Malaysia. It comes ahead of "aggressive behaviour in the South China Sea" (meaning, Chinese bullying of the Philippines and other neighbours). When asked to choose between America and China, should the region have to pick one of those rivals, 61% of respondents chose America in 2023. Now they are divided 50-50. This year's survey shows growing wariness of China's political and military clout. But its economic power is seen as unrivalled.

In Beijing's tree-lined embassy districts, a mood of pragmatism prevails. Western governments challenge China's human-rights record at faraway UN meetings, raising concerns about repression in Xinjiang or Tibet, or the crushing of political rights in Hong Kong. But foreign envoys admit to an overwhelming focus on interests. The world is too messy for noisily confronting China over values. Then there is America's presidential contest, which a diplomat calls "the Armageddon election".

In short, China has what it all along said it wanted: a world guided by interests, not values and ideology. Alas, it is responding clumsily. In some cases, it is too cynical about the motives of others. China has a bad habit of telling countries that they are America's pawns. Chinese officials accuse the Dutch and Japanese governments of bowing to America when they control exports of semiconductors and other high-tech tools, urging them to think of their interests and shun America's "cold war bloc mentality". In truth, such allies are following an overwhelming interest: maintaining relations with their strongest security partner. China is comfortable in a might-makes-right world. But fears of such a world are pushing Japan, South Korea, Australia and other neighbours to upgrade their armed forces and alliances.

A visit to Beijing this month by France's foreign minister, Stéphane Séjourné, was revealing. China's prime minister, Li Qiang, told his visitor that "our two countries have a long history and splendid civilisations" and a shared "spirit of independence"—a coded appeal to resist America together. Only last year France's president, Emmanuel Macron, pleased China by saying that Europe should not be a "follower" of America in the event of war over Taiwan. For all that, France and other European powers have serious disputes with China, based on calculations of their national interests. Some involve geopolitics. Mr Séjourné called on China to pass "clear messages" to Russia that peace cannot be imposed on Ukraine, adding that "there will be no security for Europeans if there is no peace in accordance with international law."

Trade disagreements

The sharpest rows involve economics. With domestic demand weak and the property sector slumping, China is betting on an export-led manufacturing boom. As America walls itself off, Europe fears being the last large market open to a wave of Chinese goods. Mr Séjourné told his Chinese counterpart, Wang Yi, that Europe's growing trade deficit with China is "not sustainable".

China is indignant about an EU trade probe into subsidies for electric-vehicle makers in China. In Beijing this is called a bid to blackmail Chinese firms into opening EV factories in Europe, and perhaps it is. Often, though, Chinese arguments sound dismissive or tin-eared. The official Xinhua news agency attacked the notion that Chinese overcapacity threatens other countries, calling it "basic economics that surplus products naturally seek out markets elsewhere once domestic demand is met". That ignores some basic politics: China has chosen to seek growth overseas, rather than stimulate demand at home. It yearned for interests-dominated relations with the world. Now it has them. Time to start treating foreigners' interests with more respect. ■

Middle East & Africa

Israel's wars

Stuck on all fronts

DUBAI, GAZA CITY AND JERUSALEM

Increasingly deadlocked in its conflicts in Gaza and on its northern border, Israel is ratcheting up its shadow war with Iran

IT IS NOT the first time Israel has struck Iranian targets, but it marked a serious escalation in its long shadow war with Iran. On April 1st a suspected Israeli air strike flattened a building in the Iranian embassy compound in Damascus. The blast killed seven people, including General Mohammad Reza Zahedi, a commander of the Quds Force, the expeditionary wing of Iran's Islamic Revolutionary Guard Corps (IRGC). He had served for years as the group's head of operations in Syria and Lebanon, and was close to Hassan Nasrallah, the leader of Hizbullah, the Lebanese Shia militia and political party. His deputy and five other IRGC officers were also killed in the blast. The general was the highest-ranking Iranian commander to be assassinated since America killed Qassem Suleimani with a drone strike in 2020.

Israeli officials did not publicly claim responsibility for the attack. In private, however, they left little doubt about their role. Such attacks aim to exact a price from the Iranian regime for supporting Israel's enemies. But their point is also to confront the Iranians directly, instead of allowing them to hide behind their proxies. The Israelis admit that this could provoke a vengeful response, but believe that the Iranians are risk-averse, at least when it comes to putting their own people in danger, and will back off. And as Israel looks stuck in both its war with Hamas in Gaza and its standoff with Hizbullah, it seems increasingly willing to take such risks.

Consider Gaza. The Israel Defence Forces' (IDF) recent assault on al-Shifa, the largest hospital in the strip, highlights the problems it faces in its main war. In November last year Israel encircled the hospital, claiming it was a major hub of Hamas activity. On March 17th the IDF launched another big attack on the compound in response to intelligence reports that Hamas fighters were gathering there once again. It lasted two weeks. Some of the hospital's main buildings were destroyed in the fighting. The IDF says it killed around 200 members of Hamas and Palestinian Islamic Jihad, a smaller militant group, and captured over 500 more. And yet its officers say they may attack al-Shifa a third time. On April 1st, when your correspondent visited the scene embedded with Israeli forces on the last day of the operation, Hamas snipers were still holding out in the ruins.

Six months on, Israel has exacted terrible retribution for the October 7th massacre. Palestinian deaths (civilians and fighters) exceed 33,000 according to the Hamas-controlled health ministry. But Israel faces a power vacuum and growing anarchy in the enclave. It has destroyed much of Hamas' military and governing structure there, but the group still has plenty of members. There is no prospect of the IDF ▸▸

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withdrawing from Gaza soon. It has reduced its forces there, but is also fortifying the corridor which cuts off Gaza city in the north from the rest of the strip, where most of the uprooted 2.2m people now huddle. Within Gaza's border Israel has cleared a kilometre-wide buffer zone which occupies 16% of the territory. On Gaza's coast it is building a new military base.

Meanwhile, it is only now starting to take any kind of responsibility for the humanitarian disaster in Gaza, which according to international aid organisations is rapidly becoming a famine. It is struggling to secure supply convoys into the war zone, mostly because its own forces fire at anything that moves in "kill zones" (areas deemed to be clear of civilians). On April 2nd an Israeli drone repeatedly bombed a small convoy from World Central Kitchen, one of the very few aid organisations with which Israel had a good working relationship, killing seven of its volunteers (see next story).

In private, IDF officers blame their government for a lack of strategy on all fronts. Binyamin Netanyahu, the prime minister, has refused to identify any Palestinian force that could take responsibility for Gaza's security and civilian needs, as the IDF scales down its presence.

Under increasing international pressure for a ceasefire, Mr Netanyahu is sticking to his promise of "total victory" in Gaza, insisting that it can only be achieved by Israel invading the last major Hamas stronghold in Rafah on the Egyptian border. But around 1.5m Palestinian civilians are also now sheltering there and would have to be moved out first. That would take many weeks, if it is possible at all. And America, Israel's closest ally, is vehemently opposed to any such operation. With no clear strategy or timetable in Rafah or any arrangements for Gaza for the day after the war, Israel is stuck.

Head 220km (140 miles) north and Israel looks just as deadlocked. The small neat villas of Metula, the northernmost town in Israel, seem peaceful in the spring drizzle. Look closer, however, and many show damage from fires caused by missile strikes launched by Hizbullah fighters hiding in the foothills of southern Lebanon. In normal times Metula is a popular holiday destination. Its 2,200 residents should be preparing for an influx of visitors for Passover. Instead they were all evacuated for fear of an October 7th-style attack by Hizbullah. Since then Israel and Hizbullah have exchanged rocket fire on a daily basis. The governments of Israel and Lebanon have each moved around 80,000 of their citizens away from the border because of the fear of escalation, with no idea when they will be allowed to return.

The Biden administration's effort to broker a diplomatic solution, which would include both a ceasefire and a withdrawal of Hizbullah's fighters from the border, have so far failed. "We can't allow Hizbullah to keep this up indefinitely," says an Israeli security official. "If there's no deal, the only alternative will be a pre-emptive strike," agrees David Azoulay, head of Metula's council. "Most of our residents will refuse to return home if Hizbullah isn't pushed away from the border. If only a war can achieve that, then so be it."

And so Israel, stuck in Gaza and the north, is ratcheting up its shadow war with Iran, the backer of both Hamas and Hizbullah. It thinks it has a rare opportunity to hurt Iran's proxies in the region and punish the Islamic Republic for its interference, while Iran, nervous of a broader war, is wary of any big retaliation. So far that gamble has paid off. But past performance is no guarantee of future results. If Israel pushes too far, the region could find itself in a far messier conflict.

Six months since October 7th, Israel can claim tactical gains on all three fronts—Gaza, Lebanon and Syria. It says it has killed, wounded or taken prisoner at least a third of Hamas' fighters, as well as hundreds of Hizbullah operatives and key members of the IRGC leadership. But Israel has failed to find a way out of a war on two fronts which has emptied swathes of the country. And on a third front it seems closer to escalation than resolution. ■

World Central Kitchen

No way to help

DUBAI

Israel's killing of aid workers will make it harder to feed desperate Gazans

THE ROAD was dangerous, but they took precautions. On April 1st a group of aid workers left a warehouse in Deir al-Balah, in central Gaza. The vehicles in their three-car convoy were clearly marked with the frying-pan logo of World Central Kitchen (WCK), a charity that has worked closely with Israel. Their route along the coastal road had been cleared with the Israeli army. But the precautions did not help: an Israeli drone loitering overhead fired three missiles at the cars, one after another, killing all seven people inside.

They are thought to be the first foreign aid-workers to die in the six-month Gaza war (around 200 of their Palestinian colleagues have been killed). Beyond the human tragedy, their deaths will have bigger consequences for Israel's diplomatic standing—and for hungry Gazans.

Most of the victims come from Western countries that support Israel. All are now furious. Britain summoned the Israeli ambassador for a rare démarche, and Rishi Sunak, the prime minister, told Binyamin Netanyahu he was "appalled". The United Arab Emirates, the main funder of WCK's work in Gaza, accused "Israeli occupation forces" of "targeting" the aid workers—unusually strong language from Israel's closest Arab ally. Joe Biden, who calls José Andrés, the chef who founded WCK, a friend, said he was outraged by the killings. "Israel has not done enough to protect aid workers," he said. The deaths will almost certainly lead to greater domestic pressure on such governments when it comes to arms sales to Israel. Whether they lead to a shift, in a way that 33,000 Palestinian deaths have not, is less clear.

Sorry not sorry

Isaac Herzog, the Israeli president, called Mr Andrés and expressed "deep sorrow". The army chief pledged a thorough investigation (though Israel has a poor track record of those). Israel's prime minister was less contrite: in a bizarre videotaped statement, a smiling Mr Netanyahu said that he was recovering well from hernia surgery and then acknowledged the "tragic event" in Gaza. "This happens in war," he said.

The UN says that half of Gaza's 2.2m people face "catastrophic food insecurity" and that hundreds of thousands of people in northern Gaza are on the brink of famine. Yet Israel has tried to sideline the UN Relief and Works Agency (UNRWA), the main aid distributor in Gaza.

Instead, Israel has sought to work through NGOs. It was enthusiastic about WCK. Last month it allowed the group to start shipping aid to Gaza by sea, the first time in two decades it has loosened its maritime embargo of the territory. After the drone strike, though, WCK said it was pausing its operations in Gaza and turned back ships en route from Cyprus. Other NGOs followed suit. Aid workers are willing to accept risk: that is part of the job. But the risks seem too high in Gaza. Parts of the enclave have fallen into anarchy and Israeli commanders show scant regard for protecting civilians.

The effort to bring enough food into Gaza has been haphazard and deadly. Pallets air-dropped by Western and Arab forces have struck and killed civilians. Hungry Gazans have attacked lorries and been crushed in stampedes at food deliveries. America is trying to build a pier to receive bigger shipments of aid, but the project is still weeks away from completion and there are big questions around who will secure the pier and deliver the supplies.

For months Mr Netanyahu has refused to order the Israeli army to distribute aid in Gaza itself. But if Israel does not want UNRWA involved, and if other groups do not feel safe, it will have no choice. ■

Syria

Jihadist blues

The rebels' last redoubt in the Syrian province of Idlib is in trouble

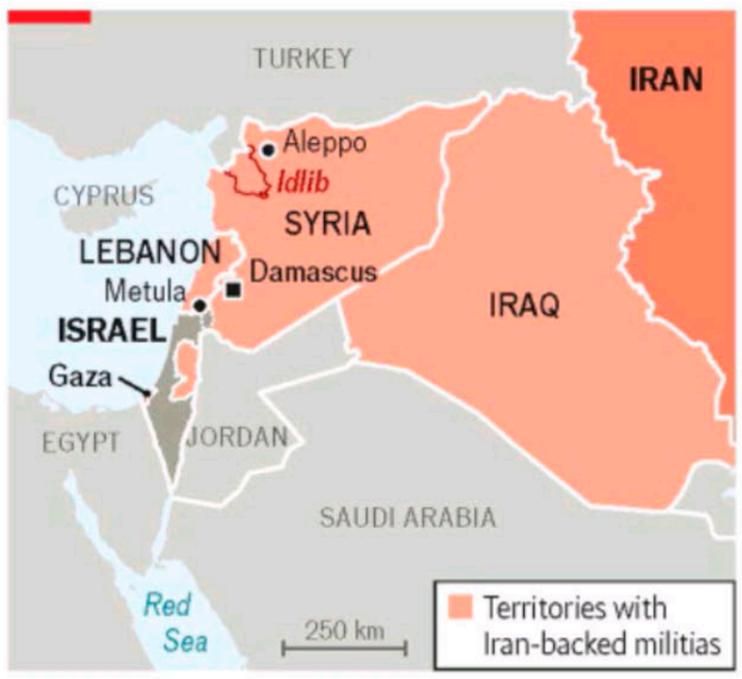
IDLIB USED to be Syria's poorest province. But under the rule of Abu Muhammad al-Jolani, a former al-Qaeda jihadist, the north-west has become the country's fastest-growing. It sports new luxury shopping malls, fancy housing estates that survived last year's earthquake (unlike those in Turkey) and round-the-clock electricity, better than the capital, Damascus, with its perennial blackouts. Mr Jolani's fief of 3m people has a university with 18,000 (segregated) students, two zoos, a funfair and a revamped football stadium. His jihadists are as likely to be found in cafés as plush as Dubai's as they are on Syria's front lines.

Since Russia diverted some of its forces to Ukraine, the war feels farther away, too. Air strikes against the rebels are fewer. Bashar al-Assad, the dictator in Damascus, still vows to reconquer the breakaway north, but his regime looks too spent to pose a serious challenge.

All that, though, could now be at risk. For over a month, hundreds and sometimes thousands of protesters have marched through Idlib's cities and towns chanting *"Isqat al-Jolani"* ("Down with Jolani"), adapting a slogan once used against the Assad regime. Thirteen years after the rebels launched Syria's "Arab spring" against the Assads, the rebels' last redoubt is facing an uprising of its own.

The protests' biggest cause is Mr Jolani's brutality. His prisons hold thousands of critics. Torture is rife and death in custody is common. Mr Jolani sees plots against him everywhere. Last summer he purged the ranks of his movement, Hayat Tahrir al-Sham (HTS), the Front for the Liberation of Greater Syria, arresting people he claimed were spies for America and Russia. He jailed his deputy, Abu Maria al-Qahtani, along with 300 henchmen. He has hobbled other jihadist movements that had moved to Idlib for refuge. When a rebel fled to a neighbouring province, he sent his thugs to grab him back.

High taxes and a recent economic downturn are also fuelling the unrest. Mr Jolani has cut a road through the mountains to Turkey. Uniquely in Syria, his street lamps stay on all night. Though his big infrastructure projects wow visitors, they anger those who have to pay for them. Customs officials tax goods entering from Turkey. His checkpoints fleece drivers smuggling tax-free fuel and cigarettes from elsewhere in the north. The collapse of the Turkish lira, the main currency used in the north, has sent prices spiralling.



Many complain they can no longer afford the lavish breakfasts that are customarily eaten in the fasting month of Ramadan.

Another cause is Mr Jolani's deviation from jihadist beliefs. His credentials look impeccable. He left his well-to-do life in Damascus, some 300km to the south, to wage jihad against America in Iraq. Islamic State, the movement that set up a caliphate across a swathe of Iraq, sent him back to Syria as the emir of a jihadist force there. He captured the province of Idlib and turned it into a haven for rebels and the many ordinary Syrians displaced by Mr Assad's forces. Idlib's population tripled.

Though he is from the south, Mr Jolani has given preferential treatment to northerners. He married into an influential Idlib family and put locals in charge of security. He cut ties with al-Qaeda and made war against Islamic State. He swapped the jihadists' Afghan dress for a suit and replaced the jihadists' black-and-white flag with Syria's tricolour. Worse, say aggrieved jihadists, he has opened his prisons to allow Western intelligence agencies to question suspects and pinpointed jihadist sites for American drone attacks. Some argue that America turned him in the mid-2000s when it captured and jailed him in Iraq.

Turkey has also grown wary of Mr Jolani. It helped him stabilise the province in order to stanch the flow of refugees. It connected his fief to Turkey's electricity grid and let building materials enter freely. But increasingly it worries about Mr Jolani's ambition. As his stature grows, he has largely dropped his claim that his is a technocratic "government of salvation", preferring bluntly direct rule.

He has twice tried to take over other bits of northern Syria that are under Turkey's thumb, says a foreign observer. Though rebuffed, his supporters there are still said to act as his agents, running checkpoints to collar cash. To cut him down to size, Turkey has reduced trade through its crossings into Idlib, shrinking Mr Jolani's takings.

Few observers think the latest unrest will unseat him yet. But his concessions suggest he is on the defensive. He recently appeared once again in jihadist garb to shore up his old credentials. He has put the morality police back on the streets. And he has freed hundreds of people he detained last summer, Mr Qahtani included. He recently promised local elections and more jobs for the displaced. And he warns protesters against treachery.

But something of the revolutionary spirit that sparked the Arab spring in 2011 still flows in Idlib. Many oppose one-man rule, whatever its hue. The demand for no taxation without representation excites the crowds. As a self-publicising arriviste and former student of media studies at Damascus University, he should listen. ■

Uganda and homosexuality

A cruel judgment

KAMPALA

The constitutional court upholds the country's bigoted law

THE MEN came for Kwagala at the beer joint she runs in eastern Uganda, shouting that she was teaching homosexuality to their children. They kicked and punched her. "I ran as fast as I could, thinking to myself, 'This is my day, this is how I die'," recalls Kwagala, a trans woman whose name we have changed for her safety. When the police arrived they locked her up for three days and charged her under Uganda's Anti-Homosexuality Act, which became law last May. Her attackers went free; she faces life in prison if convicted.

On April 3rd the country's constitutional court upheld the core provisions of the law. Those include long prison sentences for "promoting homosexuality" and the death penalty for "aggravated homosexuality", including for anyone deemed a serial offender. The judges did strike down some sections, such as a duty to report gay people to the police. But they argued that the law reflects Uganda's history, traditions and culture, likening their reasoning to that of America's Supreme Court when it overturned abortion rights in 2022. The judges leant on "public sentiments and vague cultural-values arguments" rather than upholding human rights, says Nicholas Opiyo, lead counsel for the petitioners.

Ten years ago the same Ugandan court struck down an anti-gay law on procedural grounds. This time activists had challenged the act on both process and substance, and lost. The decision contrasts with court rulings in Botswana in 2019 and Mauritius in 2023, where judges decriminalised gay sex. It will send ripples across Africa, including in Ghana, where President Nana Akufo-Addo is under pressure to sign into law a recent anti-gay bill.

Africa's anti-gay reforms are not driven by presidents, who are wary of the diplomatic fallout, but by ambitious lawmakers and religious leaders, sometimes with friends in right-wing American groups. Although Uganda's president, Yoweri Museveni, makes homophobic remarks in public and has done nothing to stop the law, allies of his have privately told Western diplomats of their reservations. That could be because America has imposed visa restrictions on Ugandan officials, warned business of the reputational risks of operating in Uganda, and removed duty-free access for its exports. The World Bank has suspended new loans.

For LGBT people in Uganda, where 94% of citizens say they would not want a gay neighbour, the law has made a bad situation worse. They have been evicted, sacked, outed, threatened, assaulted, arrested and subjected to forced anal examinations. Rights groups recorded 300-plus cases of abuse in the first eight months of last year alone. Much of the hostility comes from ordinary Ugandans who have been "radicalised into hatred", says Frank Mugisha, a gay-rights activist who was a petitioner in the court case.

Kwagala just wants to live in peace. After she was charged, her father disowned her. She is barred from family funerals. Her landlord has closed her beer joint. "My whole life has changed because of this law," she says. "I've lost everything." ■

Climate change

The shadow of the sun

ADDIS ABABA

Recent heatwaves in Africa warn of the sweltering future that awaits

SOUTH SUDAN'S children returned to school on April 2nd, not from a holiday but a heatwave in which thermometers reached 45°C. Teachers had been finding it just as difficult to concentrate as students, says Chol Guran Mayuot, who teaches in Juba, the capital. "You get up in the morning and you feel exhausted already."

This February was the world's hottest ever recorded, the ninth record-breaking month in succession. Africa sweltered. Its southern cone was 4-5°C above the seasonal average. In some parts of west Africa the combination of heat and humidity made it feel hotter than 60°C. In recent weeks it has been the east's turn to fry. The Horn of Africa "risks being uninhabitable" because of heatwaves, warned Ismail Omar Guelleh, the president of Djibouti.

Temperatures have been boosted by El Niño, the warm phase of a semi-regular oscillation in the world's climate. But that is just an upward bump on a remorselessly rising trend. West Africa's humid heat was made ten times more likely by climate change, estimates World Weather Attribution, a network of climate modellers.

As Africa cooks, inequality is baked in. A study in Nairobi found that it was several degrees hotter in dense slums than in the leafy surroundings of the meteorological department, where official readings are taken. It is even more stifling indoors. While the rich slumber in air-conditioned rooms, the poor toss and turn beneath tin roofs. In the South African summer, temperatures recorded inside shacks swing by 14°C over the course of the day.

The workplace brings no relief. Many Africans toil outside, in jobs from farming to roadside carpentry. In Swahili, east Africa's lingua franca, informal work is known as *jua kali* (hot sun). The sapping effects of heat drain the equivalent of 161 labour hours from the average African worker a year, reckons the Lancet Countdown, an international group of researchers. That reduces potential earnings of formally employed workers by 4% (data for informal or unpaid work are sparse).

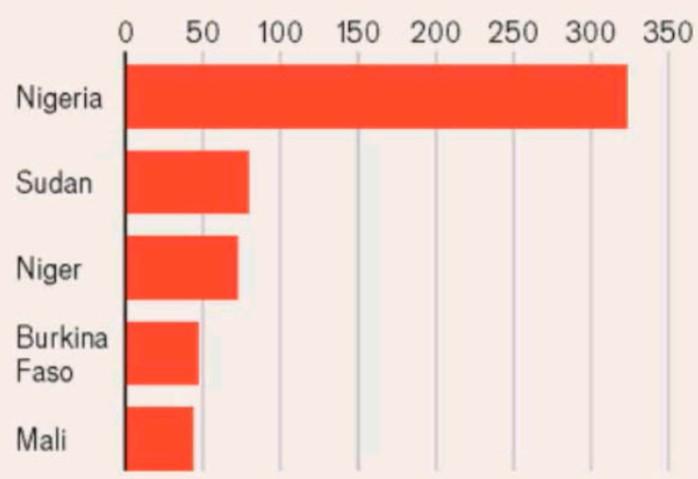
Hot weather also threatens health. Heat exposure is associated with a higher risk of pre-term births, stillbirths and hypertension in pregnancy, among other problems, says Gloria Maimela of the University of the Witwatersrand. A study in Burkina Faso found that with each extra degree of heat mothers breastfeed for two fewer minutes a day. Health clinics in many countries are poorly ventilated and are hotter than the air outside.

Better buildings, greener cities and shadier workplaces would all make Africa cooler. "This is an emergency," says Eugenia Kargbo, the chief heat officer in Freetown, the capital of Sierra Leone. She reels off a string of measures that the city has taken, from planting a million trees to installing sunshades in outdoor markets. It is also testing out a reflective film applied to iron roofing. MEER, an American non-profit behind that idea, says the mirrors can reduce indoor temperatures by 6°C.

On March 28th the mayor of Freetown, the president of Djibouti and other leaders took part in the first global summit on extreme heat, hosted by America's aid agency and the International Federation of Red Cross and Red Crescent Societies. They discussed strengthening early-warning systems and drafting heat action plans. But 330m Americans alone emit nearly six times as much carbon dioxide as all 1.2bn sub-Saharan Africans. It is good to help other countries adapt to climate change—and to stop fuelling it. ■

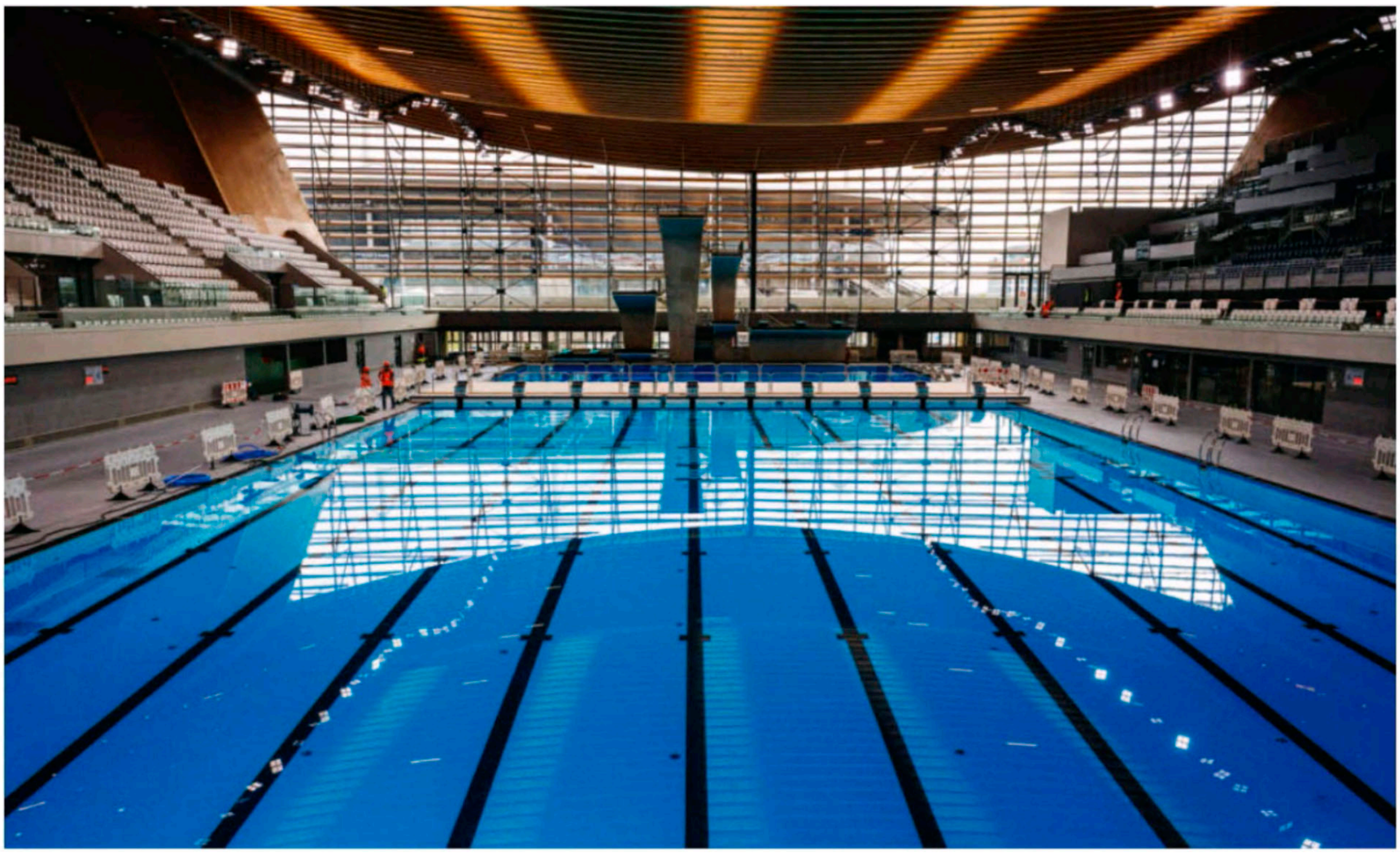
Helter-swelter

Population exposed to unprecedented heat*, selected countries, 2070 forecast†, m



*Average annual temperature ≥29°C, based on a 2.7°C warming scenario above pre-industrial levels †World population of 9.5bn
Source: "Quantifying the human cost of global warming", by T. Lenton, *Nature*, 2023

Europe



The new geography of Paris

Making a splash

SAINT-DENIS AND SAINT-OUEN

How the French hope the Olympics will help reshape the capital

ON THE SITE of a former piano factory in the northern Paris suburb of Saint-Denis, a 40-storey tower is being converted into a gleaming luxury hotel with a rooftop bar. A short walk away, beside the river Seine, builders are finishing off a vast new "eco-neighbourhood" of flats, lined with saplings and lamp posts made from recycled scaffolding. These will briefly lodge 10,500 athletes during the Paris Olympic games, which take place from July 26th-August 11th. Across the railway tracks, on land that formerly housed a gasworks, workers are completing a brand-new aquatics centre, under a gently curved timber frame of French and Finnish pine.

These developments are part of an attempt by French urban planners to use the Olympics to revive Seine-Saint-Denis, a *banlieue* (suburb) that hugs the north and eastern edges of Paris. During the games many sporting events will take place in the historic city centre, including beach volleyball under the Eiffel Tower. But some of the most prestigious, such as athletics, will be held at the Stade de France in Seine-Saint-Denis. More than this, the Olympics is part of a big rethink of greater Paris, and its transport system, which could in time radically change the capital's geography.

As in many of Europe's old cities, the historic centre of Paris, with its tree-lined avenues and cycle lanes, is fringed by poverty, high-rise blocks and former industrial land. Paris, delineated by its forbidding *périphérique*, an eight-lane ring-road, is particularly cut off. In the capital's cobbled centre, urban planners enthuse about the "15-minute city", in which work, cafés and cinemas are but a short walk away. In the *banlieues*, it often takes longer than that just to reach the station—if there is one.

Fully 1.7m people of different tongues and faiths crowd into Seine-Saint-Denis, where tower blocks were built in the 1960s and 1970s partly to house industrial workers recruited in North Africa, and their families. Its poverty rate is 28%, nearly twice that in Paris. Almost a quarter of families are headed by a single parent. At the age of ten, says Quentin Gesell of the Métropole du Grand Paris, an administrative body, half the children in Seine-Saint-Denis today do not know how to swim.

The various greater Paris authorities now hope that the Olympics can help turn this area's fortunes, and reputation, around. The sheer scale of investment, much of which will not be complete until the end of the decade, is eye-watering. Under a plan first hatched in 2007, tunnels are still being dug to create a giant loop of 200km of new driverless Metro lines and 68 new stations, known as the Grand Paris Express. When finished, it will double the existing Metro network. Crucially, instead of carrying people from the *banlieues* only in and out of the centre, it will also link the ▸▸

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outskirts to each other and the city's airports, all at a cost of some €42bn ($45bn).

The idea, says Marie Barsacq, in charge of Olympics legacy-planning, is that the games leave behind facilities and transport, as well as creating jobs and boosting skills. Seine-Saint-Denis, which today has the fewest swimming pools per head in France, will be bequeathed not just the new aquatics centre but over a dozen new or renovated public pools. The staff needed to prepare and serve 13m meals in the athletes' village are all being hired locally.

Karim Bouamrane, the Socialist mayor of Saint-Ouen, sees the Olympics as an accelerator for reviving the area. Projects already under way have been given a boost; sporting facilities a facelift. New transport links will make Saint-Ouen one of the best-connected hubs in the Paris *banlieue*. Elon Musk's Tesla, an electric-car firm, has picked Saint-Ouen for its new French headquarters. Tony Parker, a French-American former professional basketball player, is opening a new sports academy there. "Before, when you used to come to Saint-Ouen it was because you had no choice," says Mr Bouamrane. "Now it's a choice."

The lesson from other European cities that have tried similar projects, including London's Stratford or Hamburg's HafenCity, is that better infrastructure can help revive neighbourhoods and lure private developers. But it takes time, and huge upfront public investment. Post-covid, developments that rely on office space are fragile. Extravagant vanity projects can leave a pile of debt and little else. France certainly loves its *grands projets*. But Paris is focusing events mostly on existing facilities, in order to avoid the fate of host cities such as Athens, where the stadiums at Hellinikon were left abandoned for years afterwards.

For places like Saint-Ouen, just beyond the ring-road, the chances of such investment paying off are probably greater than for those on the outer periphery. Yet the challenge of bridging the gulf between Paris and its *banlieues* is still daunting. Advanced sales of flats at the athletes' village have been slow. Many Parisians seldom, if ever, venture to the outskirts. Locals feel their address, and the *département* code 93, stigmatises them. "We really struggle with the 93," says a woman outside a *boulangerie* in Saint-Ouen; "As soon as you mention 93, it's no good." Mr Bouamrane notes that "etymologically the word *banlieue* means the 'place of the banished'. It's the place where we don't like you."

Across from the nearly finished Metro station at Saint-Denis Pleyel, a teenage girl on a street bench thinks that not much will change: "There will still be drugs, alcohol, traffickers, dealers and all that." A young man hanging out with friends by the Turkish kebab shop laughs at the idea that they would use the swimming pool afterwards: "We're not children!" Yet others in his group display an unexpected optimism. "There will be a before and after for Saint-Denis," declares one: "After the games, Saint-Denis will be super-beautiful." ■

Turkey

Strongman trounced

ISTANBUL

The opposition wins mayoral elections in Istanbul, Ankara and nationwide

TURKEY WOKE up transformed on April 1st, after the country's main opposition party scored a spectacular upset in local elections. It won big victories in the country's largest cities, surging past the ruling Justice and Development (AK) party nationwide and handing Recep Tayyip Erdogan, the country's president, a stinging rebuke. The Republican People's Party (CHP) got 37.8% of the overall vote, compared with 35.5% for AK. That figure masked landslide wins in the big cities. In Istanbul, the biggest prize, Ekrem Imamoglu, the city's CHP mayor, coasted to another term. He got 51.1% of the vote, compared with 39.6% for his AK rival, Murat Kurum, a former urban-affairs minister.

"What message did the people give our opponents, the government and the president?" asked Mr Imamoglu, standing on his campaign bus to celebrate the victory. "Tayyip, resign!" chanted part of the crowd. Mr Imamoglu, however, sounded more conciliatory. "There will be no booing...The era of partisanship is over."

Mr Erdogan's job is safe. But the outcome in Istanbul was a blow to Turkey's strongman, who had been determined to win back Istanbul, which he and AK had run for a quarter of a century until Mr Imamoglu's surprise victory in 2019.

Even more striking were the results elsewhere. "Tsunami", an Imamoglu adviser crowed on X. Only ten months after a poor showing in the general elections, when it blew a golden chance to unseat Mr Erdogan, the CHP handed AK its worst defeat in its 22-year history. The results again confounded the pollsters. Many had expected the CHP to do well in the cities. But none expected it to top 30% nationwide.

In Ankara, the country's capital and its second-biggest city, the CHP's incumbent mayor, Mansur Yavas, trounced AK's candidate by nearly 29 percentage points. In Izmir, Turkey's third city, the CHP's man won by 12 points. For the first time in decades the opposition also made major inroads in the country's conservative heartland, AK's power-base. "The electoral map of Turkey has been transformed," said Evren Balta of Ozyegin University. Mr Erdogan acknowledged that the outcome marked "a turning point" but pledged to bounce back at the general elections in 2028. "We will correct our mistakes."

Mr Imamoglu's victory was a far cry from his win in 2019, when he edged out his AK foe by a mere 20,000 votes, only for Mr Erdogan to pressure Turkey's election authority to overturn the results and order a rerun. Mr Imamoglu won again, by a bigger margin. Three years later a court banned him from politics and sentenced him to two years in prison (both penalties were stayed pending appeal), for calling the officials who stripped him of his initial victory "idiots". That case goes on.

Mr Imamoglu's re-election and the CHP's resurgence should reshape national politics. A victory for AK would have made it easier for Mr Erdogan to push ahead with introducing a new constitution, probably designed to give him at least another term. The scale of AK's losses in Istanbul and elsewhere means that his appetite for such changes, which would need to be put to a referendum, may be gone. "This is off the books now," says Berk Esen of Sabanci University. Mr Erdogan may have to speed up plans to find a successor as AK leader.

The marked improvement on the CHP's disappointing result (25.3%) in last year's general election had a lot to do with the economy, which remains in the doldrums. Even after interest-rate increases totalling more than 40 percentage points, annual inflation is still inching upwards. In March it topped 68%. Cheap credit and government largesse have run out. Mr Erdogan can no longer offer voters the kind of handouts that once shielded them, though only to an extent, from rocketing prices. "People are feeling the economic pain even more than before," says Ms Balta.

An overhaul of the CHP's leadership also helped. Last November the party deposed its longtime leader, Kemal Kilicdaroglu, who had squandered a chance to beat Mr Erdogan in the presidential election, and replaced him with Ozgur Ozel, ▸▸

The triumph of Imamoglu

who is much closer to Mr Imamoglu. Another factor was a strong showing for New Welfare, a newly formed Islamist party that took votes from AK, having recently split from Mr Erdogan's governing coalition. It got 6% of the overall vote and won outright in two of Turkey's 81 provinces. So AK can no longer take hardline Islamist voters for granted.

The Good party, an opposition party that once seemed on course to dominate Turkey's centre right, continued its slide. The party, which only two years ago polled in the high teens, received 3.8% of the overall vote. Its leader, Meral Aksener, whose leadership had already come under scrutiny after she flip-flopped on Good's alliance with the CHP last year, is under pressure to step down.

Nowhere in the elections were the stakes as high as in Istanbul. Home to 16m people, it accounts for nearly 20% of Turkey's population and more than 30% of its economic output. Control over its $16bn budget and its patronage networks helps political parties finance themselves and their cronies. The city also makes and breaks careers. It was his win in the mayoral elections in 1994 that propelled Mr Erdogan onto the national stage and eventually to Turkey's highest office.

Mr Imamoglu's chances of following the same route have now vastly improved. Already the opposition's most recognisable politician, the 52-year-old now has a clear path to a run in the presidential election in 2028. Meanwhile, Mr Erdogan is in a pickle. "He may even have to contemplate an early election or a transition back to a parliamentary system," says Mr Esen. The last thing he wants is for Mr Imamoglu to inherit the executive presidency Mr Erdogan designed for himself, which places almost no checks on his powers. "For him, that's a nightmare scenario." ■

Poland and Ukraine

A neighbourly feud

HREBENNE

Poles and Ukrainians are at loggerheads. That's good news for Vladimir Putin

FLASHING BLUE lights shield protesting Polish farmers from the ten km-long line of Ukrainian lorries they are holding up at the Hrebenne-Rava Ruska border crossing. The drivers say they would waste little time in moving the protesters aside were the police not there. Huddled around a barrel fire, the farmers say they are only protecting their economic future; they do not want to be undercut by "under-regulated" Ukrainian grain. The drivers, some of whom have been waiting in freezing weather for weeks, ask what that has to do with the lorries carrying goods and humanitarian aid into Ukraine, which are also being held up. No one has an answer.

The border demonstrations, now five months old, have economic roots. At the start of the war, when Ukraine lost access to its deep-water ports in the Black Sea, the EU temporarily exempted Ukrainian lorry drivers from a permit system that restricts movement in and out of the bloc. That upset Polish drivers, who had dominated the local freight business. Meanwhile a suspension of import duties and quotas on Ukrainian farm goods, produced by larger, more efficient outfits, posed competition to small Polish farmsteads, already pinched by EU environmental laws. A slump in world grain prices, plus politicking ahead of Polish local elections in April, heightened the tension.

The protests have cost Ukraine hundreds of millions of dollars in lost farm and freight business. It is worse for the drivers waiting at Hrebenne. Before the protests, they were making five trips a month; now they are lucky to make one. Strict quotas decide who gets through. At the Hrebenne crossing it is one lorry an hour, or four for perishable or humanitarian goods.

The farmers' protests are fertile ground for Russia to influence Poles with misgivings about Ukraine's potential accession to the EU, when its drivers and exporters would face no limits at all. An investigation showed that one of the protesters appeared to be connected to the Russian embassy in Warsaw. One protest banner appealed to Mr Putin to "restore order", an unlikely message in Poland but one that generated a lot of media heat. There may be links between Russia and some members of Poland's hard-right Confederation party, which played a role in the earlier protests. Andriy Cherniak, a spokesman for Ukraine's military-intelligence agency, says the Kremlin is trying to work on whatever level it can. "We see it very clearly and we follow it. We doff our hats to them, to be honest. It's impressive work."

One Ukrainian military researcher says Russia is stepping up its media-influence ambitions. The internet has provided new opportunities to penetrate public opinion at a fraction of the previous cost. The researcher says a recent Ukrainian exercise found 18,000 suspicious Facebook pages promoting fake narratives about the Polish protests—for example, exaggerating Ukrainian corruption.

An analysis by Antibot4Navalny, an activist group that tracks Doppelganger, the Kremlin's social-media influence network, tells a similar tale. A network of approximately 10,000 bots retweeted a fake news story about the Polish protest seen by 50,000 users. Many Doppelganger stories exaggerated tension between Ukrainians and their neighbours. The impact of these operations is less clear. Colonel Taras Dzyuba of the Ukrainian army's strategic-communications department says the Russians play a long game. "They rarely achieve results immediately, but wear down people's defences so they become willing to hear new sources of information."

Intense negotiations at the EU level offer hope of resolving the border problem. Krzysztof Paszczyk, parliamentary leader of the Polish People's Party, part of the governing coalition, says Ukraine and Poland are close to a compromise on agricultural imports that would appease the farmers and let the EU reach an agreement to extend duty-free trade with Ukraine.

In any event, the protest has damaged the countries' relations. At the start of the war Poland and Ukraine were united as blood brothers against a common enemy. The Poles took in refugees and slipped MIG fighter jets over the border, disguising them as spare parts. Now many Poles see Ukraine as a corrupt or even dangerous competitor. Many Ukrainians see Poles as impeding their survival. Confusion and distrust reign. And even if the idea that Russia has had a hand is exaggerated, it has poisoned the well further. ■

Organised crime in Italy

The white-collar mafiosi of Naples

NAPLES

They run restaurants and bars and rent out apartments these days

IT IS COLD enough for the waitress serving in the lane outside to be clad in a puffer jacket. Yet the diners, tourists hardened by northern winters, seem untroubled as they savour their meals. An unexceptional scene. Except that it is past 10pm and the restaurant is in the Quartieri Spagnoli, a gridiron of alleyways in the heart of Naples that, until recently, outsiders entered at their peril. Pickpocketing, mugging and bag-snatching were all common—licensed and exploited by a clan of the Camorra, the Neapolitan mafia.

The opening of the Quartieri and other traditionally crime-ridden districts is symptomatic of profound changes in the criminal landscape of the city and its surrounding province. In 2023 there were ten gangland killings, compared with 34 in the 12 months to mid-2013. Attempted murders ascribed to the Camorra fell over the same period from 17 to just four.

In part, this is due to police success. Most of the older bosses have been put away. And on March 29th it emerged that one of the most powerful, Francesco Schiavone, aka Sandokan, who led the clan that inspired Roberto Saviano's best-seller "Gomorrah", had turned state's evidence.

Still, according to the inter-force police detachment that targets organised crime nationally, Naples, along with nearby Caserta, still has the country's highest density of mafia penetration. Rosa Volpe, the chief district anti-mafia prosecutor, warns against reading too much into those figures. "Organised crime in Naples has not diminished," she says. "It has evolved."

According to police intelligence, there are 46 clans in the city itself and another 24 in the surrounding province. Some have made vast profits, notably from importing and selling cocaine. The most credible estimate of the Camorra's annual turnover dates from 2014 when it was put at around €3.3bn ($3.6bn). Individual drug traffickers became fabulously wealthy. Raffaele Imperiale, whose trial is due to end this month, owned two stolen Van Goghs and an island off Dubai. After his arrest in 2021 he was found to have spent almost €7m in the first quarter of the previous year.

Ms Volpe divides the Camorra's affiliates into three overlapping categories. Those who belong to groups still controlling defined areas of the city make their money from extortion, drug peddling and other criminal activities. But they have been gradually curtailed over the past 20 years by the jailing of many of their longstanding bosses. Second are "baby gangs": young street criminals, in many cases sons of imprisoned Camorristi whose territory they are charged with securing. The third group consists of those who have so far escaped arrest and whose focus is on investing and laundering the profits from drug trafficking. Many are no longer in Italy.

A special team has been set up to detect large-scale money laundering. But according to a businessman with family ties to the Camorra, much of the investment has been in small businesses—bars, restaurants and apartments suitable for short-term tourist letting—that offer risk diversification. "If you buy a hotel and it's seized, you lose everything," he says. "If you buy ten bars and two are seized, you still have eight." That also helps explain the remarkable changes in central Naples: street crime is bad for business, and business is increasingly where Camorristi are to be found, though Ms Volpe cautions that many remain active in drug trafficking.

Those with personal experience of the Camorra's world argue that mobsters laundering their wealth have a vested interest in doing businesses legally. That might sound like good news, after a fashion. Ms Volpe is unconvinced. "The risk is that of the pollution of the city's legitimate business system," she says. ■

Happy Finns

Magic of the North

BERLIN

The key to contentment is to break a sweat

FOR THE seventh year running Finland has just been declared the world's happiest country by the World Happiness Report, launched in 2012 to promote the sustainable development goals of the United Nations (UN). Those surveyed were asked to evaluate their lives on a scale of one to ten, with ten the highest. While Scandinavian countries as usual occupied the top spots, both America (see Lexington) and Germany fell out of the top 20. War- and revolution-racked Afghanistan held the bottom spot in the ranking of 143 countries, with a score of only 1.7 compared with Finland's 7.7 and Denmark's 7.6.

Gender equality, trust in national institutions and fellow citizens, and low corruption are all important factors in Finns' happiness, says Kai Sauer, Finland's ambassador to Germany. In 1906 Finland became the first country in the world to give women both the full right to vote and to run in parliamentary elections. When last year a reporter for *Reader's Digest*, a magazine, pretended to lose 12 wallets with cash and contact details in 16 cities around the world to test citizens' honesty, Helsinki, the Finnish capital, turned out to be the most honest of the lot; 11 of the 12 wallets were returned. And according to the latest annual index by Transparency International, a Berlin-based organisation, Finland is the second-least-corrupt country in the world—after Denmark.

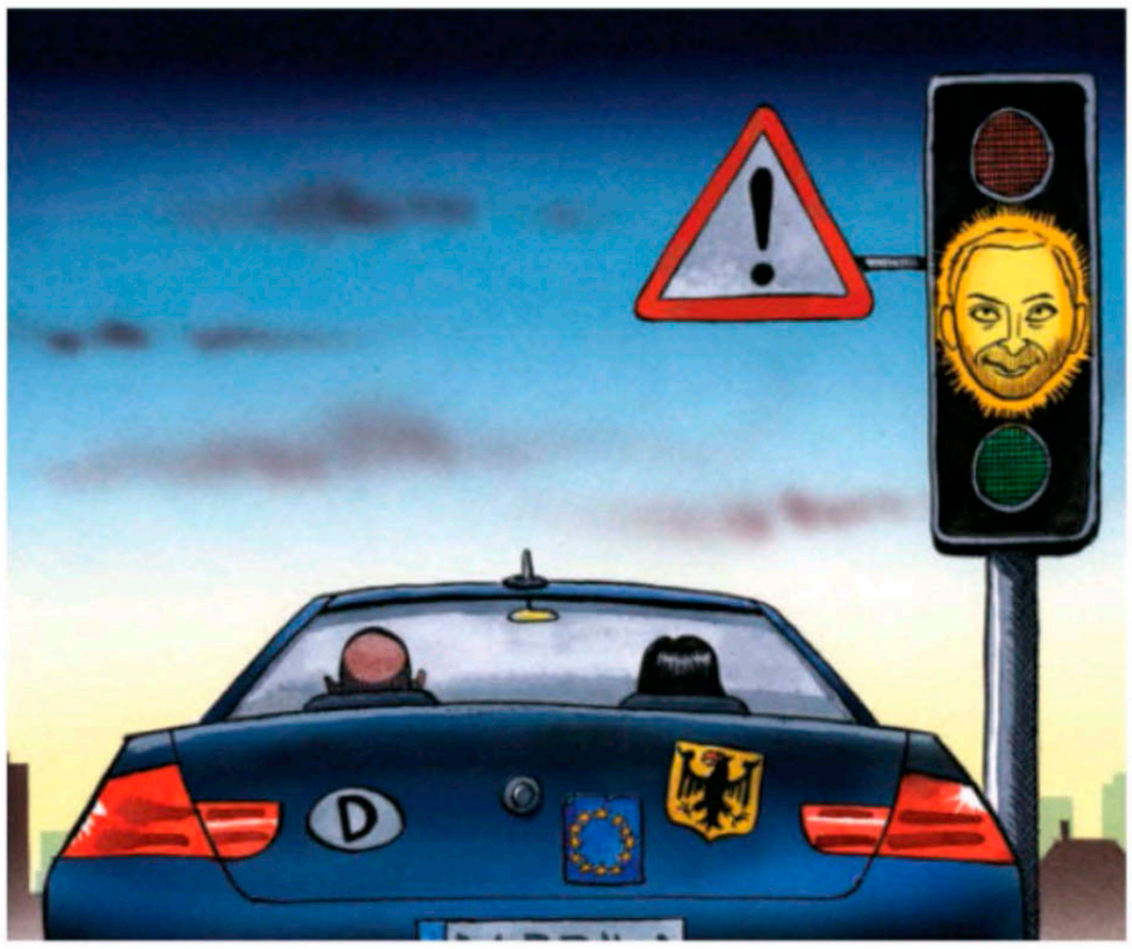
Don't worry, be happy

Excellent free education, universal health care and family-friendly policies play an important role in making Finns content with their lives. Finland's education system ranks eighth among the world's best educated countries according to the UN World Population Review. Health services are not free, but they are affordable.

Yet some argue that the real reason is that the Finns sweat out their negative thoughts. Finland has roughly 3.5m saunas, more than one per two Finns. All government buildings have saunas. An exhibition in Berlin called *Die Sauna. Echt heiss. Echt finnisch.* sponsored by the Finnish embassy, is celebrating sauna culture with photos, videos and, you guessed it, a sauna. It's a huge hit. All its remaining sessions are booked out.

CHARLEMAGNE
The tiny wreckers

Germany's Free Democrats have become desperate spoilers



LIKE SMALL nations (think of Bosnia or Kuwait), pipsqueak political parties can generate outsize effects. Consider Germany's Free Democratic Party (FDP). The smallest of three partners in the coalition that has ruled the country since 2021, it holds just four cabinet posts, out of 17. The pro-business party is weaker still at the local level, serving in just two of the 16 state governments, and as a junior coalition member in both of them at that. Barely one in 20 Germans currently says they would vote for it in a national election. Yet this very fragility has made the FDP increasingly desperate to fire up its base.

That makes it dangerous. In domestic politics the party now constantly snipes at its coalition allies and flirts with the opposition, making an already unpopular government even more so. In Brussels, meanwhile, FDP grandstanding has helped gum up EU legislation on issues from vehicle emissions to supply-chain rules to the protection of nature. The actual damage that has been caused has, so far, been limited, except perhaps to the mental health of thwarted Eurocrats and to Germany's reputation as a force for moderation. But as the spring budget-making season in Berlin heats up, and as European elections approach in June (followed by a trio of tight German state elections in September), the temptation for the FDP to undermine its coalition partners and sabotage European unity will only increase.

Founded in 1948, just before the German federal republic itself, the FDP has served in more national governments than any other party, albeit always in a supporting role. The party's peak performance in a federal election, in 2009, saw it win 14.6% of the votes and a record 93 of the 600+ seats in the Bundestag (the number of MPs varies slightly with each election). Yet at the very next election, in 2013, the FDP failed to reach the 5% threshold of votes cast that are needed for a party to win any seats in parliament.

The party soon bounced back off the ropes. Under an energetic new leader, Christian Lindner, it found its way back into not just the Bundestag but national government. In the current coalition the FDP yellow flickers uncomfortably between the red of chancellor Olaf Scholz's Social Democrats (SDP) and the Greens' obvious green; hence the "traffic light" nickname for the coalition. Mr Lindner serves as finance minister, a role he has not shied from using as a pulpit for the party's agenda.

That has often meant taking a rigid stand over the "debt brake" that has since 2016 put strict limits on German governments' ability to borrow. Appealing as it may be to many voters as a check against profligate spending, the curb has proved onerous in a time of multiple crises. Predictably, Mr Lindner has clashed with his cabinet colleagues, with those from the left-wing SDP decrying threatened cuts to social services and the Greens complaining about delays to environmental measures, even as security hawks worry that he has failed to make fiscal room for what is sure to be a sustained rise in defence spending. Jens Südekum, a Düsseldorf-based economist, has described the finance minister's rumoured plans for sweeping cuts in next year's budget as "insane", given Germany's flatlining GDP growth.

Mr Lindner is neither an incompetent manager nor a political novice. He has faced internal pressure; in a vote in December just 52% of his party's members voted to stay in the coalition. Yet Tarik Abou-Chadi, a teacher of European politics at Oxford, suggests that Mr Lindner's focus on sustaining the FDP's brand has put the party on a "destructive mission". The feeble response from Mr Scholz has not helped. Mr Abou-Chadi suggests that in trying to keep peace in his coalition and protect the domestic agenda of its Social Democrat and Green components, the chancellor has given its smallest member extra leeway at the European level.

Hence, perhaps, the FDP's stirring of trouble in Brussels. To be fair, plenty of other parties, typically from the right, agree on the same issues. What really annoys European legislators is that the FDP has repeatedly intervened at the finish line of the laborious lawmaking process. For a struggling party with barely 70,000 members to variously scupper, delay or force late-night workarounds for legislation affecting 450m Europeans is infuriating. "If we don't agree to what we've already negotiated, we undermine the entire European legislative process," declared Eamon Ryan, Ireland's environment minister, in late March, as a long-prepared law aimed at rehabilitating the EU's rivers, seas and forests faced sudden flak that was partly initiated by the FDP and which has left it blocked.

Dangerous friends

Needless to say, the FDP's supporters take pride in punching above their weight. They include powerful corporate interests. German carmakers were not displeased when the party last year succeeded in slipping last-minute exemptions into a proposed EU ban on selling new internal-combustion vehicles from 2035. And there was relief among smaller firms after a long-debated corporate sustainability due-diligence directive (obliging companies to ensure their supply chains are free of environmental or human-rights abuses) had its proposed ceiling for compliance raised from an annual turnover of €150m ($162m) to €450m.

These minor gains, which have hurt Germany diplomatically, have not improved the party's ratings. In poll after recent poll, the FDP has skated along the edge of the 5% abyss; this week, it was at around 4%. Instead of rewarding the party for its fiscal probity and Euroscepticism, voters are turning to more reliably conservative, or even hard-right alternatives. "They have been so worried about their brand position that they have ended up hurting it," says Mr Abou-Chadi. "In the end they would have benefited more from being part of a smooth-running government." ■

TELL THEM I MADE IT

Hem Moktan earned just $45 over the three years he was concealed as a child laborer in Nepal. He was only a young boy, but the carpets he hand-knotted were sold in fine showrooms across the United States and Europe — until one company partnered with GoodWeave. GoodWeave rescued Hem and provided him counseling, education and a place to live. Now with a master's degree, Hem heads GoodWeave Nepal's child protection program, transforming other children's futures as his was.

Hem made it. You can help other children make it in life too. Look for the GoodWeave® label on carpet and home textile products — your best assurance no child labor was used.

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Britain

The Bank of England

Stormy weather

How the Bank of England has managed four years of economic shocks—and how it might do better in the next four

SEVEN DAYS after Andrew Bailey became governor of the Bank of England in March 2020, Britain's first covid-19 lockdown began. Storms have kept coming. The economy has had to endure two more supply shocks (the completion of Brexit and a leap in energy prices after Russia invaded Ukraine); a demand boost (post-pandemic fiscal stimulus); and a bond-market blowup (after Liz Truss's reckless mini-budget in September 2022). Any central banker would want calmer weather.

Halfway through Mr Bailey's eight-year term, how has the bank fared? Judged by its main job, maintaining price stability, direly. The annual inflation rate has exceeded the bank's target, 2%, for almost three years, peaking at 11.1% in late 2022 before falling to 3.4% in February. The core rate—excluding food and energy—is at 4.5%.

Still, most forecasters expect the bank to be nearing its target again within a few months. And central bankers are not all-powerful. Their tools—in essence, spurring or reining in demand by setting short-term interest rates and intervening in bond markets—can be little use in the face of big supply shocks. A fairer yardstick is inflation expectations: has the bank persuaded firms, households and markets that inflation won't stay high for long? Expectations of persistently high inflation can be self-fulfilling, as firms and workers bid up prices and wages in an attempt to stay ahead.

Here, the record looks better. Britons' long-term inflation outlook has barely budged (see chart 1 on next page). But the bank's credibility, polished over a quarter-century of independence, is showing a few dents. Prices of inflation-linked bonds imply that markets expect inflation to be 0.3 percentage points higher in the long term than they did when Mr Bailey took charge. Surveys say that 39% of Britons expect inflation to exceed 3% in five years, against 31% in early 2020. The number of Google searches for "inflation" has trebled in the past four years. When inflation surges again, the bank cannot afford to dither.

Even allowing for its blunt tools, might the bank have done better? It was taken by surprise not once but twice. The first surprise was that inflation emerged at all. The trouble started in 2021, as the pandemic ebbed and the need for stimulus wore off. The bank delayed raising rates until that December (see chart 2), earlier than many central banks but still too late.

At the time the need to tighten was not wholly clear-cut. Spending on goods had boomed in the pandemic, straining supply chains. But it was hard to be sure that that was truly a sign of broad overheating rather than of isolated stress. The labour market looked slack—a government "furlough" scheme was supporting around 1m jobs—but proved not to be. When the scheme ended, unemployment kept falling. ▸▸

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Even so, the bank was too sanguine. A "Taylor rule"—a rule of thumb devised by John Taylor, an American economist—suggests that rates should have been rising by mid-2021. Other countries, including Brazil, Chile and Norway, did lift rates sooner.

Worse, the bank continued quantitative easing (a policy of buying bonds begun when rates were at rock bottom after the financial crisis of 2007-09) deep into 2021, even as markets had stabilised and bond yields sat at their lowest for centuries. (The bank has lost an estimated £50bn-130bn, or $63bn-164bn, on its bond purchases, covered by the Treasury.) And the sheer size of the government's pandemic spending, amounting to 10% of GDP in 2020-21, should have caused concern sooner, especially given the disruptions to supply.

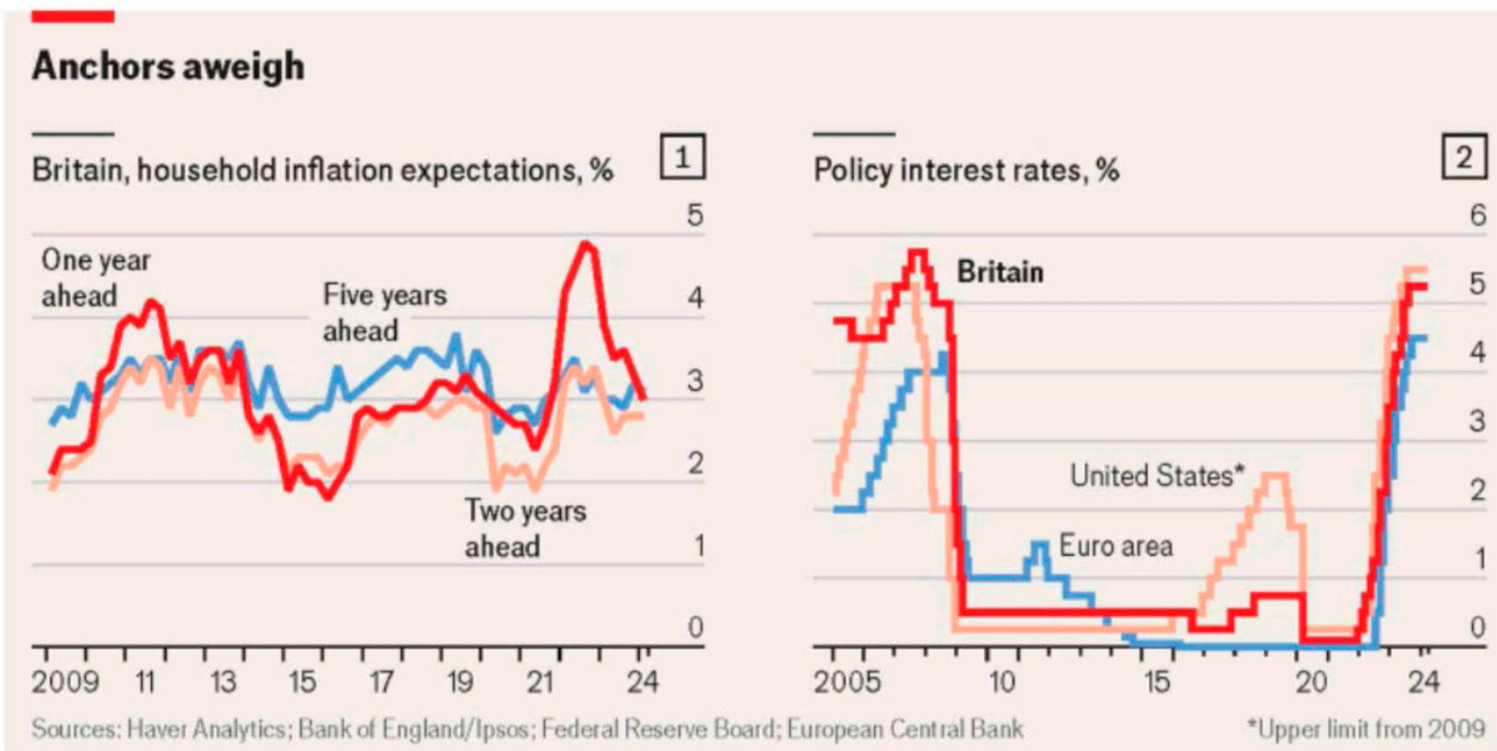
The second surprise was that inflation stayed high. By 2022 post-pandemic inflation had been amplified by Russia's invasion of Ukraine. Natural-gas prices went parabolic, hitting ten times the levels of the 2010s. The bank consistently predicted that inflation would soon fall (see chart 3). Instead, it spread from energy, food and other goods to services, wages and housing, from which it is harder to root out.

Even as gas prices plummeted in 2023 after a warm winter in Europe and a slowdown in China, core inflation kept rising. Last summer the bank asked Ben Bernanke, an ex-chairman of the Federal Reserve and a Nobel economics laureate, to review its forecasting practices. His findings are due on April 12th.

Macroeconomic forecasting is notoriously tricky. Data are sparse and inexact; the structure of economies shifts over time. A key variable in forecasting inflation is the size of "second-round" effects: how far will price rises be self-perpetuating? Such effects fed a decade of brutal inflation after the oil shocks of the 1970s. But from the 1990s they faded. Workers did not chase inflation-reinforcing pay increases. Weaker trade unions, migration and globalisation probably played a part; so did credible, independent central banks.

The bank was wrong-footed when that post-1990s pattern did not persist. Second-round effects were back. Academics suspect that recent price shocks were severe enough to make history a poor guide to how firms and workers might respond.

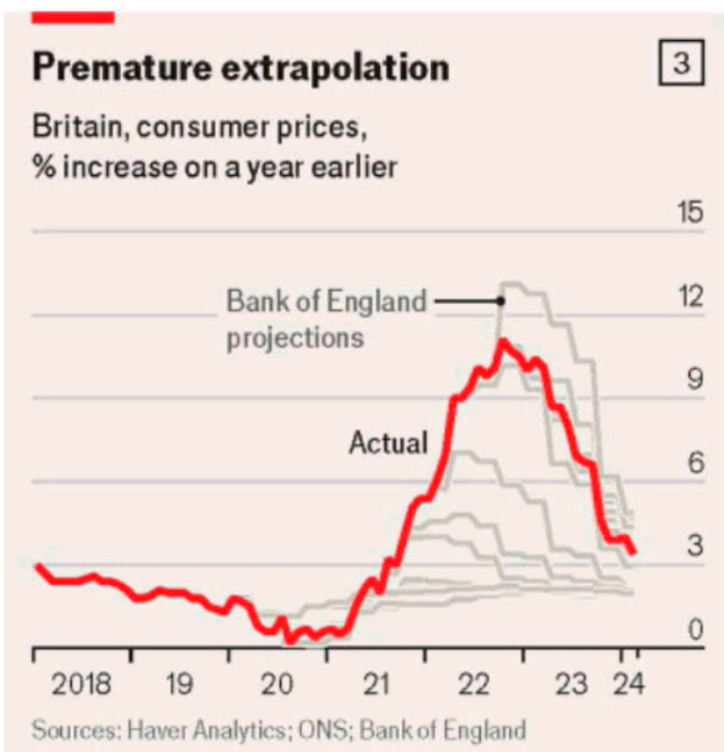
The bank will doubtless revise its models accordingly. But good central banking ought to try to take account of uncertain forecasts. Mr Bernanke is expected to recommend scenario-oriented forecasting. Developing and publishing a scenario incorporating 1970s-style second-round effects, for instance, would have been valuable. Another good idea, advocated by Catherine Mann (who is on the bank's rate-setting committee) and Isabel Schnabel (of the European Central Bank) is to lean towards tighter policy when rising inflation is not well understood (eg, when it has defied forecasts).



Many central banks have struggled with forecasting. But the Bank of England's lapses in communication have stood out. Sometimes it has been tin-eared (if economically accurate). Mr Bailey called pay rises "unsustainable". Huw Pill, the bank's chief economist, said Britons should "accept that...we're all worse off" from the energy shock. On occasion, it has embarrassed itself. Rumours trickled out about Mr Bailey's penchant for falling asleep in meetings. Uncharitable colleagues nicknamed him "Rock-a-bye Bailey".

Communications mishaps about policy are more serious. Especially during crises, central bankers must speak clearly to financial markets, which set the long-term borrowing costs facing households and businesses. Policymakers' priorities will then be transmitted quickly across markets. But the bank approached rate rises slowly and piecemeal.

Mr Bailey did not, for example, give a speech like that of Jerome Powell, who heads the Fed today, in August 2022 at Jackson Hole, Wyoming. Mr Powell hammered home the idea that he would tighten policy as much as needed to tame inflation. Mr Bailey sometimes tried unhelpfully to talk markets out of pricing in interest-rate rises. In March 2023 he questioned whether it was wise to expect rates to go as high as 4.75%, as markets then did. They ultimately reached 5.25%.



With inflation high, by 2022 public confidence in the bank had sunk uncomfortably low. But the bank found unlikely saviours in the 49-day prime minister, Ms Truss, and her 38-day chancellor, Kwasi Kwarteng. Their spendthrift fiscal plan caused an implosion in bond prices that the bank handled deftly with an injection of liquidity into the gilt market.

That earned the bank political capital, which will be especially valuable as a general election, due by next January, draws near. When moves in interest rates could, in principle, help one party or the other, the bank must be above suspicion.

If, as looks highly likely, the Labour Party wins the election, what might that mean for the bank? Much less than after Labour's most recent return, in 1997. Within days the new chancellor, Gordon Brown, surprised markets by declaring the bank independent. Rachel Reeves, the shadow chancellor today, who once worked at the bank, has more modest intentions. She promises to uphold its independence, keep the 2% inflation target and refocus financial regulation on climate risk.

Some Conservatives may be less friendly, blaming the bank for both the inflation and the stagnation likely to contribute to their defeat. Out of office, they will pose no direct danger, but if the economy remains lacklustre they may nevertheless fuel distrust of the bank.

So the bank will have to get better at politics. The best way to do that will be to get better at its main job, fighting inflation. The past four years have battered its credibility, though it remains mostly intact; and in a more volatile, inflation-prone economic environment, it will be called upon to police price rises more than to stave off recession. Mr Bailey may hope that the next four years will be less stormy. Don't expect the weather to oblige. ■

BAGEHOT

Mate, mate, maaate

Khan's London offers a taste of Starmer's Britain

FOR A FEW hours on July 21st last year, Piccadilly Circus's advertising hoarding provided the perfect symbol of Sadiq Khan's eight years as mayor of London. The 5,500 individual LED tiles arranged themselves into six five-metre-high letters to spell one giant word: "MAAATE". It was the pinnacle of Mr Khan's "Say 'Maaate' to a Mate" campaign, which encouraged young men to call out sexism by their peers. It even came with an interactive video, in which a young man's behaviour degrades—at one point he dry-humps a sofa—until the viewer hits a button marked "MAAATE", the man apologises and the group of jobbing actors return to their game of FIFA.

It is well-meaning, ineffectual, cringeworthy and yet the best the mayor can do with his limited resources. The mayor of London has a mighty title but a puny role. Ending violence against women is beyond his actual powers, which extend to managing public transport, some planning law and advising the police. London is, ultimately, beholden to central government when it comes to how many police patrol its streets or how many social workers local authorities can afford. Sometimes, all a politician can do is plaster "MAAATE" on a billboard and hope for the best.

When power and money are lacking, policy can become limited and gimmicks prosper. It is not a happy recipe, but it is one that Sir Keir Starmer, the Labour Party's leader, has pledged to follow. Sir Keir's vision for Britain is one of little extra spending coupled with modest reform. Those wondering how this will turn out should consider Mr Khan's years in power in London.

Mr Khan came to office largely by default, as most likely will Sir Keir. The Conservatives dismiss London as a hotbed of liberal luvvies even though it is also a city of bankers, lawyers and accountants in million-pound houses. Mr Khan's re-election on May 2nd will come via apathy rather than affection. In the run-up to the poll, he holds a 25-point lead over Susan Hall, a little-known, scandal-prone local Conservative (though the mayor's aides say the race is closer). Sir Keir is likely to enter Downing Street because the Tories have, in 18 months, run through three prime ministers, caused a market panic, increased taxes to their highest in 70 years and let immigration rise to a record level having promised to cut it.

Winning by default can lead to caution. A timidity haunts both Mr Khan and Sir Keir. The mayor's main achievement has been extending the Ultra Low Emission Zone (ULEZ)—inside which pollution-heavy vehicles incur a daily levy of £12.50 ($15.70)—to all of London, including its car-loving outer boroughs. Yet Mr Khan pushed on largely because it was seen to be uncontroversial; barely 5% of cars are affected. The backlash hurt him. Now he flinches from genuinely ambitious ideas, such as pricing road use by the mile. London, which has low rates of car-ownership and generally good public transport, is the only place where such policies can be easily tried. Mr Khan's cowardice costs the country as a whole.

Labour is in danger of repeating Mr Khan's mistake. It talks boldly about planning reform, for instance. Yet the proposals are thin. Tweaks to existing legislation will be favoured. Fundamental problems with the planning system—that it allows erratic case-by-case decision-making by local politicians—will remain. Tinkering with a system causes just as much political pain as a wholesale change, as Mr Khan found with ULEZ. Why not be bolder if the political price is likely to be the same?

Both Sir Keir and Mr Khan let opponents set the terms of debate. Rather than push on with a radical agenda to further reduce London's reliance on cars, Mr Khan allowed a ring of voters in the capital's suburbs to limit his ambition. Mr Khan has a toxic relationship with central government, with both sides revelling in the fight. By contrast Andy Burnham, the Labour mayor of Greater Manchester, managed to squeeze money and power out of a Conservative government while still landing blows.

Likewise Rachel Reeves, the shadow chancellor, has pledged to abide by the Conservatives' fiscal rules almost wholesale, while matching their farcical post-election spending plans pound-for-pound. Labour has promised to radically improve Britain's public services without spending extra money. What is the result when a politician promises change without the means to pay for it? Usually, a billboard emblazoned "MAAATE".

Where Mr Khan has been bold, it has often been belatedly. Eight years after he was first elected he has begun to implement unapologetically left-wing policies, such as free school meals. If children need free school meals in 2024, they needed them in 2016, too. Policy delayed is policy denied. A similar sluggishness afflicts Labour nationally. The party talks of fixing Britain being a ten-year project. With little money up front, improving public services via better management alone becomes an even longer, slower grind. Perhaps its leaders are lying and an emergency budget, with the blame dumped on their predecessors, is in the works. More likely, the party will waste a few years, panic, increase taxes, borrow more and then take the blame itself.

Have a word

If Labour is to prosper in government, it must avoid the errors of Mr Khan. Not being the Conservatives is an adequate electoral strategy, but a poor governing one. Initial boldness will ensure more policy survives the inevitable backlash. Luckily Sir Keir and Mr Khan can help each other out. Devolving tax-raising powers to mayors would help Mr Khan do more than hire giant billboards. Ensuring London, Britain's most dynamic city, can prosper is the best of way of boosting growth, the main goal of Sir Keir's administration. Labour is rarely in government at all, never mind with a big majority. Control of both the capital and the country is a gift. Blowing it would merit only one response. *Maaate.* ■

International

The Rwandan genocide

Ever again

Thirty years after Rwanda, genocide is still a problem from hell

THE KILLING started on April 7th 1994, as members of the presidential guard began assassinating opposition leaders and moderates in the government. Within hours the genocide of Rwanda's minority Tutsis was under way. It was among the fastest mass killings in history: 100 days later three-quarters of Rwanda's Tutsis, about 500,000 people, were dead. Most were killed not by the army but by ordinary Hutus, the majority group. "Neighbours hacked neighbours to death," wrote Philip Gourevitch, an American journalist. "Doctors killed their patients, and schoolteachers killed their pupils."

The roughly 2,500 United Nations peacekeepers in Rwanda did almost nothing. Agathe Uwilingiyimana, the moderate Hutu prime minister, was among the first to die. She had been guarded by 15 UN peacekeepers, but they surrendered. Lando Ndasingwa, the Tutsi leader of the Liberal party, called the peacekeepers, saying that soldiers were preparing to attack his home. An officer promised to send a detachment, but was still on the phone when he heard gunfire. "It's too late," Lando said.

The world stood by and watched. Roméo Dallaire, the Canadian general commanding the peacekeepers, was warned beforehand of the extermination plan. In a cable to Kofi Annan, then the UN's peacekeeping chief, he said he planned to raid arms caches and pre-empt the genocide. Annan refused permission and ordered him to do nothing that "might lead to the use of force". Three weeks into the genocide, the Security Council voted to withdraw all but about 270 peacekeeping troops. "This world body aided and abetted genocide," the general later wrote.

Thirty years later, the Rwandan genocide is remembered as one of two events in the 1990s that prodded a guilt-ridden world to pledge never again to stand aside and allow mass atrocities. The other was the massacre by Bosnian Serbs of thousands of Muslim men and boys in Srebrenica the following year. In 2005 the UN General Assembly unanimously adopted the principle that all countries have a "responsibility to protect" (R2P) people from genocide and war crimes, by force if necessary. The dream was that from Rwanda's horrors would emerge a well-policed world.

Instead the nightmare has continued. In Ethiopia, Myanmar, Sudan, Syria, Yemen and elsewhere, global powers have done almost nothing as millions have been bombed, gassed and starved. The war in Gaza, too, has brought tensions between principles and geopolitics to a head, with bitter claims and counterclaims about Hamas's atrocities and the legality of Israel's destructive six-month-long military campaign, which have played out in the media, diplomacy and international courts.

To understand how the global push to prevent mass killings collapsed (and whether it can be revived), it helps to start ▸▸

with Rwanda, which strengthened the case of global human-rights advocates, and then to examine how cynical realpolitik made a comeback.

The early 1990s were hopeful years. The end of the cold war allowed democracy to blossom in eastern Europe and in Africa. The first Gulf war ejected Saddam Hussein's army from Kuwait and signalled that wars of expansion would not be tolerated. Western powers led by America sent troops into famine-struck Somalia to guard a humanitarian mission under attack by warlords, showing that they cared not just about oil but about the welfare of the starving. The spread of liberal democracy seemed unstoppable.

Yet reality had a vote. Six months before the genocide in Rwanda, America pulled out of Somalia after 18 of its commandos were killed in Mogadishu, the capital. The battle cast a long shadow: UN peacekeepers in Bosnia were instructed not to respond forcefully when fired on, for fear that they "cross the Mogadishu line" and become embroiled in the fighting. Bill Clinton, America's president, turned against peacekeeping operations unless they involved America's national interests.

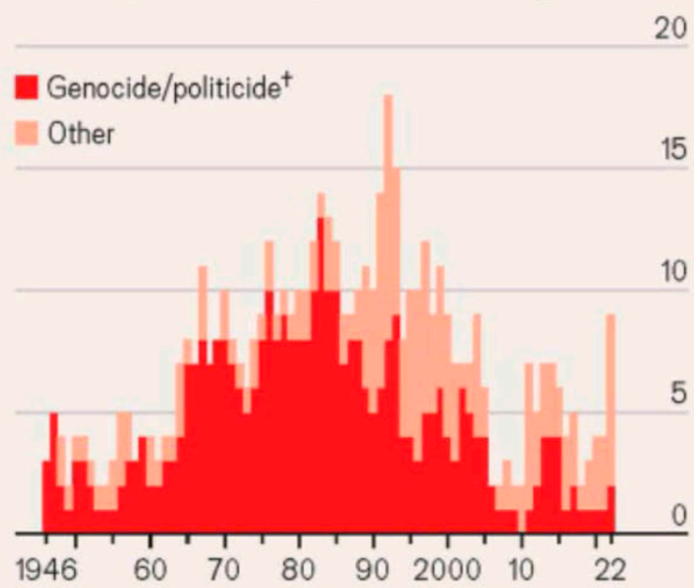
Rwanda did not. State Department lawyers warned officials not to call the atrocities there a genocide, lest it commit the government to "actually do something". Britain's ambassador to the UN warned against "promising what we could not deliver" in terms of protecting civilians.

Still, when the horror of the genocide became clear, Western voters and political elites were revolted by this cold-hearted calculus. Samantha Power, a former journalist who now heads America's aid agency, recounts in her memoir that President George W. Bush scribbled "not on my watch" on a memo summarising an article she had written about America's failure to act in Rwanda. "You had a generation of politicians like Tony Blair, David Cameron, Nicolas Sarkozy in France, who had seen their predecessors' failings, and that shaped their responses to later crises," says Richard Gowan, a veteran UN-watcher in New York with the International Crisis Group (ICG), a think-tank. In 2000 Mr Blair, Britain's prime minister, sent troops into Sierra Leone, stopping rebels who were chopping off people's hands.

Standing in the way of such interventions was the doctrine that countries should not interfere in each other's internal affairs. The UN's charter, signed in 1945, forbade meddling in "matters which are essentially within the domestic jurisdiction of any state". Though its Security Council could authorise force, this was intended as a response to aggression, not to prevent atrocities. Newly independent African countries had had their fill of colonial powers trampling on their sovereignty. In

Atrocity meter

Global episodes of targeted mass killings*



*The killing of 25 or more non-combatants by an armed force
†At least 1,000 deaths and either statements of intent or evidence of preparations for genocide/politicide
Source: Atrocity Forecasting Project, Australian National University

1963, when they formed the Organisation of African Unity (OAU), the members committed themselves to "non-interference".

Rwanda shook that belief. In 2003 the African Union (AU), the OAU's successor, gave itself the power to intervene to prevent grave crimes. Others went further: America, Britain and several other Western countries began claiming the right to use force unilaterally without the authority of the Security Council, which they argued had become paralysed because each of its five permanent members—America, Britain, China, France and the Soviet Union (now Russia)—has veto power. In a speech in Chicago in 1999, Mr Blair outlined a doctrine of just wars "based not on any territorial ambitions but on values". He insisted the world could not simply allow mass murder. That doctrine has since become policy. In 2018 the British government reserved the right to prevent atrocities without the Security Council's authorisation, if its paralysis would lead to "grave consequences" for civilian populations.

Angels with F-16s

All this converged into a current of thought known as "liberal interventionism". In Kosovo in 1999 NATO bombed what was then part of Serbia, without Security Council authorisation, to stop a genocide against ethnic Albanians. An international commission subsequently judged the bombing campaign "illegal" but nonetheless "legitimate" because there was no other way to stop the killing of civilians. Yet many were unsettled that powerful countries were arrogating the authority to bomb others in the name of human rights. Weaker states worried it would excuse "neocolonial" interference.

Annan, by then the UN's secretary general, tried to reconcile sovereignty and protection of civilians. In 2000 he asked: "If humanitarian intervention is indeed an unacceptable assault on sovereignty, how should we respond to a Rwanda, to a Srebrenica?" The answer was R2P, which tried to reconcile the aspirations of liberal interventionists with the worries of weak states. The R2P resolution, passed unanimously by the UN in 2005, held that countries had a responsibility to intervene, but only when authorised by the Security Council. A British historian, Sir Martin Gilbert, called it "the most significant adjustment to national sovereignty in 360 years". That goes too far, thinks Gareth Evans, a former foreign minister of Australia and one of the founders of R2P. Nonetheless, he calls it "a wildly successful enterprise".

Mr Evans argues that R2P created a new norm: no official today can openly shrug off genocide for reasons of state, as Henry Kissinger, then America's secretary of state, did while cosying up to Cambodia's Khmers Rouges in 1975. Meanwhile, since Rwanda almost all UN forces have been ordered to protect civilians—though they are seldom given enough troops to do so, says Alan Doss, who ran such missions in Liberia and Congo. Critics counter that R2P creates no binding obligations on countries. The doctrine is a "slogan...enthusiastically avowed by states but one devoid of substance", says Aidan Hehir of the University of Westminster.

In early 2011, in the first real-world test of R2P, the Security Council approved the use of force by NATO to protect civilians in Libya. (It did so again two weeks later in Ivory Coast.) "I refused to wait for the images of slaughter and mass graves before taking action," President Barack Obama said. Crucially, the council's three rotating African members (Gabon, Nigeria and South Africa) broke with the AU and supported the resolution. But not everyone was enthusiastic. John Bolton, a Republican former diplomat, had called R2P "a gauzy, limitless doctrine" whose greatest danger was not that it might fail, but that it might succeed and lead to ever more foreign entanglements.

In the event, what was to have been R2P's vindication proved its undoing. At first the bombing in Libya worked, preventing a massacre of civilians in Benghazi, a city in the country's east. Yet Britain and France then stretched the authority granted by the Security Council and toppled Muammar Qaddafi, Libya's dictator. The subsequent civil war destabilised the entire region. That dampened the West's enthusiasm for intervention. It also revived "long-held suspicions of the motivations behind Western interventions in Africa", argues Karen Smith of Leiden University, a former UN special adviser on R2P. African supporters of the doctrine, such as South Africa, turned into sceptics. "Good intentions do not automatically shape good outcomes," Ramesh Thakur, a former UN official and an architect of R2P, wrote after the

effort in Libya went sour. "On the contrary, there is no humanitarian crisis so grave that an outside military intervention cannot make it worse."

For many, mission creep in Libya was the original sin that undermined R2P. "It's when things started to fall apart," laments Mr Evans. Yet even had the Libyan campaign succeeded, the doctrine would probably have stumbled. Western publics were tiring of the decade-long "war on terror" and unsuccessful efforts at building liberal democracies in countries that did not seem to want them. "We now have a generation of politicians who have been shaped by the failure of intervention in Iraq and Afghanistan," says the ICG's Mr Gowan.

That became clear in 2013 when Syria's president, Bashar al-Assad, dropped nerve gas on civilians. By then Mr Obama had grown sceptical about using force; he spoke of red lines but did little when they were crossed. Other Western powers were no more eager to act. Inaction, it turned out, has costs too. By 2023 Syria's civil war had claimed perhaps 350,000 lives and displaced roughly half of the population, sending waves of refugees into neighbouring countries and Europe.

The Security Council was hamstrung by geopolitical rivalry. Some point to the problem of the "great-power perpetrator", in which a permanent member of the council itself commits atrocities. Russia invaded Georgia in 2008, and Ukraine in 2014 and on a bigger scale in 2022; it has been mainly interested in undermining the council. Between 2011 and 2022 it vetoed 17 resolutions on Syria, and it has blocked any action on Ukraine. China has been reluctant to approve actions to prevent atrocities, perhaps because it reserves the right to abuse its own citizens. On Syria it voted with Russia, insisting that sanctions would abridge the country's sovereignty.

The failure to act in Syria has been followed by passivity in the face of atrocities elsewhere. In 2017 government forces in Myanmar began killing and raping Rohingyas, a long-persecuted Muslim minority group, in what the UN and America have branded genocide. Again the Security Council was powerless, as China and Russia prevented it from issuing even mild statements of concern.

In 2020 civil war broke out in Ethiopia. Government forces sealed off Tigray, a northern region, and deliberately starved its roughly 6m people. By the war's end two years later some 600,000 are thought to have died, nearly all of them civilians. The Security Council stayed almost completely silent. Russia and China were not the only obstacles: the AU dropped its policy of "non-indifference" to war crimes and sided with the Ethiopian government, blocking efforts to raise the conflict before the council. As a result, "the atrocity-prevention toolbox for Africa is likely to remain shut, its tools quietly rusting away," wrote Alex de Waal of Tufts University.

The situation is being repeated today in Sudan, where civil war risks causing the world's biggest famine, with at least 25m people in need of food. Much of the blame lies with the Sudanese Armed Forces, which have blocked the flow of aid into areas controlled by their enemy, the Rapid Support Forces, a group of rebellious paramilitaries. They, in turn, are accused of genocidal killings. For almost a year Russia and China blocked even calls for a ceasefire. The wider world has been indifferent. "We seem to be rapidly unlearning the lessons of Rwanda," says Mr Gowan.

This is the backdrop for the claims and counterclaims in the Middle East. After Hamas attacked Israel on October 7th, killing and abducting 1,400 people, mainly civilians, the West affirmed Israel's legitimate right to self-defence. Yet worldwide protests erupted almost immediately against Israel, and have spread as its military campaign has killed around 33,000 civilians and fighters in Gaza, according to the Hamas-run health authority.

Whose responsibility is it to protect him?

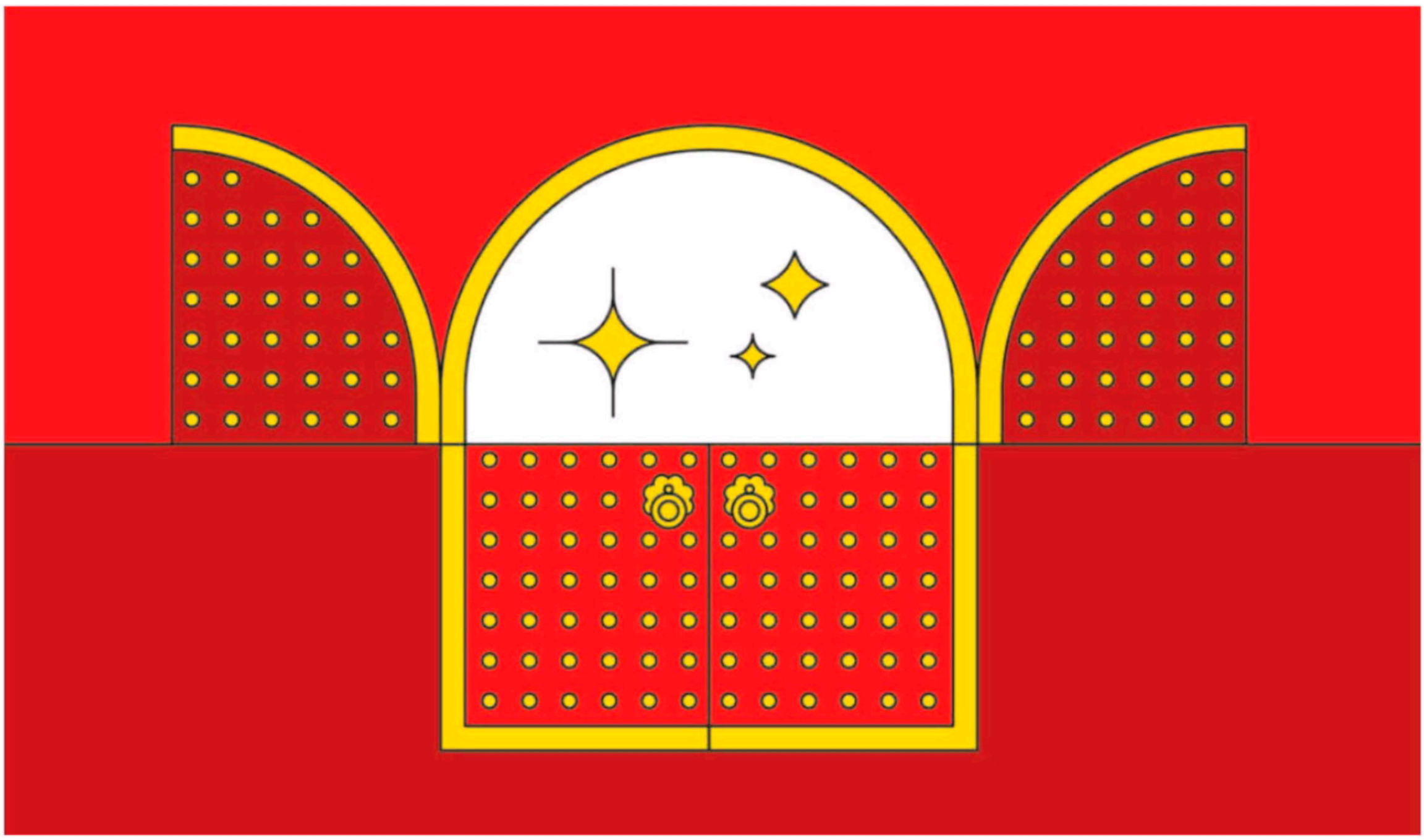
Tell it to the judge

From one perspective the conflict has triggered a renaissance in the use of international law to curtail violence. The Security Council has proved ineffective, with America, China and Russia blocking each other's resolutions (although on March 25th America allowed one to pass, calling for a ceasefire and the release of Hamas's hostages). But several countries have turned to international courts. South Africa asked the International Court of Justice (ICJ) in The Hague to order Israel to halt its military operations, invoking the Genocide Convention, which Israel has signed. It also filed complaints at the International Criminal Court (ICC), a different court in The Hague that can arraign individuals. (This was quite a turnabout: South Africa had flirted with quitting the ICC to avoid honouring its arrest warrants.) While the trial at the ICJ continues, it has ordered Israel to take steps including providing humanitarian aid, on the basis that it is "plausible" that it is breaching the Genocide Convention. Israel says it is complying with the order; many dispute that.

Yet from another viewpoint the ICJ case illuminates the shortcomings of international law in an age of bitter geopolitical divides. The ICJ has no jurisdiction over war crimes other than genocide, which encourages complainants to allege genocide even when the facts do not support it. That cheapens the taboo against genocide and discredits the court. The ICJ case has disillusioned some Western countries. America says the allegation of genocide is "meritless", and Britain says South Africa's decision to bring the case was "wrong and provocative" and that Israel's actions cannot be described as genocide. For its part, China, usually a foe of international courts' ordering countries around, has opportunistically decided it likes the claims against Israel. The case will take years to resolve and the ICJ cannot compel compliance with its orders without the help of the Security Council, which is split.

Is there still hope for a credible and universal doctrine to prevent mass killings? Mr Evans thinks so, and that current conflicts may alert the midsize powers of the new multipolar world to the need to prevent atrocities. That seems more a wish than a prediction: his memoir, published in 2017, is titled "Incorrigible Optimist". But it is hard to disagree with his aspiration. "We can't afford to let the flame die," he says. ■

Business



Business in China

A new opening?

BEIJING

Xi Jinping wants to woo back foreign business. But the commercial logic looks increasingly forbidding

FOR YEARS foreign companies were desperate to get into China, and faced formidable bureaucratic obstacles in their way. Now many are getting out. Over the past 12 months several foreign law firms have closed some or all of their Chinese offices. Orrick, Herrington & Sutcliffe, an American one, said on March 22nd it would shut the Shanghai office it opened 20 years ago. Another, Akin Gump Strauss Hauer & Feld, plans to exit China altogether this year. Some global investment banks are pruning their Chinese staff. So are a few large accountancies and due-diligence groups. In 2023 foreign direct investment in China fell to its lowest level in 30 years.

One reason for foreigners' change of heart is the sorry state of the Chinese economy (see Finance & economics section). Of the 18 largest multinational companies that report their earnings from China, 13 saw annual revenues there fall in 2023. Qualcomm and Samsung, two technology giants, recorded sales drops of more than 20%. Apple sold nearly a quarter fewer iPhones in the first six weeks of 2024 than it did in the same period the year before. In February Tesla shifted 19% fewer electric cars. Weak Chinese sales are the main reason why Kering, the French owner of Gucci, expected to flog a fifth less of its bling in Asia in the first quarter.

President Xi Jinping and the Communist Party are keenly aware of these problems. And they care. At least that was the message broadcast loudly at the China Development Forum (CDF) in Beijing on March 24th-25th, and echoed a few days later at the Boao Forum, China's (less snowy) answer to Davos. The mood at both jamborees was decidedly better than last year, when it was spoiled by a suspected Chinese spy balloon floating above America before being shot down on the orders of President Joe Biden. Many Western corporate bigwigs who stayed away were back; more than 80 foreign chief executives turned up in Beijing, including lots of Americans. In Boao a senior official vowed that China would make it easier to move capital in and out of the country. Two days earlier, at a separate event, Mr Xi assured a handful of American CEOs that China would continue to reform and open up.

Participants report that Mr Xi and party officials are doing more now than in the past four years to stress that China is still open for business—a nice change after the pandemic years, when its leaders assiduously quarantined themselves from the outside world. "At the very least the meetings showed there is a strong desire to communicate," says a boss who attended the CDF both this year and last. Earlier in March the State Council, China's cabinet, launched a 24-point "action plan" for attracting foreign investment. It included familiar ideas such as protecting intellectual property and promoting trade agreements, and welcome additions such as fostering ▸▸

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cross-border data flows. A few weeks later the main internet regulator eased some onerous data rules that in the past two years have made foreign businesspeople nervous about routine things such as sending emails to colleagues abroad.

The trouble is that Mr Xi's desire to lure back foreign business runs up against his other objectives. Observers describe his leadership model as "wanting this, that and the other". Foreign companies are to do business in China but keep their hands off Chinese data. Multinationals are to double down on China and homegrown brands are meant to give them a run for their money. China's technology industry is to decouple from the West while attracting Western investment. And global businesses are to like all this, never mind that it works against their commercial interests.

Marxist theories of the sort Mr Xi likes to elevate may be able to resolve these contradictions. But capitalists see trade-offs and choices. And business logic increasingly argues in favour of greater circumspection about China.

Consider data flows. Regulators may have loosened some restrictions but weeks earlier they tightened others, by updating a state-secrets law for the first time since 2010. The law now covers "work secrets", or information that is "not state secrets but will cause certain adverse effects if leaked". The vague wording gives security agencies broad powers to consider any communication between foreigners and Chinese employees as a potential violation. On March 28th, as foreign CEOs mingled with party bosses in Boao, the Ministry of State Security released a six-minute instructional video. In it a Chinese engineering company is convinced by foreign investors to allow a foreign due-diligence firm to investigate it. An executive at the company travels in time to visit an incarcerated version of his future self, who warns him not to hand over company secrets to the investigators. When, back in reality, they ask him to share sensitive information, the enlightened executive reports them to the authorities instead.

Spooked

The lessons of the film are as unsubtle as the acting. For Chinese viewers, it is that foreign investors and consultants could be working for hostile foreign governments and must not be trusted. For foreigners, it is not to look too hard into obvious material concerns such as a company's supply-chain vulnerabilities or its links to the state, which could make a business susceptible to Western sanctions.

Any such investigation of China's chip industry, a big target of American restrictions, has long incurred the party's wrath. Now less sensitive sectors, such as electric vehicles (EVs), batteries, renewables and biotechnology, are increasingly out of bounds, too. Chinese executives at the Beijing branch of a climate consultancy were recently questioned by security agents about the information it collects on local firms and to what foreign entities it has divulged it. The interrogation came as a surprise, because the outfit had enjoyed seemingly strong support from China's environmental regulators. The incident led it to slim down its Chinese operations and try to eliminate reporting lines between staff based in China and in other countries.

A further reason foreigners are having second thoughts about China is stiffening local competition, a lot of it given a leg-up by the state, one way or another. Government support for makers of EVs, batteries, solar panels and wind turbines has created oversupply and pushed down prices. This has been a blessing for foreign importers of Chinese-made components. For multinationals trying to compete in China it has been a curse. Margins on sales of electrolysers, bulky machines used to produce hydrogen, are said to have dropped to almost nothing in recent months. In March BYD, a Chinese EV giant and longtime recipient of state largesse, dropped the price of its compact electric car to just $9,700, perpetuating a price war that has forced Tesla to sell its EVs for less. Foreign industrial firms face hundreds of local rivals that appear to operate in the red. In 2023, 22% of industrial companies in China lost money, an all-time high.

Officials also invoke a mix of national security and national pride as a reason to choose Chinese products over Western ones. Apple must contend not just with downbeat consumers but also with a new line of smartphones from Huawei, a Chinese tech champion targeted by American sanctions—and with public servants and employees of state-run firms being told not to buy iPhones, lest they contain backdoors through which the American government can steal information. Teslas have been banned from some government facilities and airports on the grounds that they film their surroundings. State-owned enterprises and government agencies have been instructed to replace chips from Intel and AMD, two American semiconductor firms, with Chinese-made ones by 2026. They are also to phase out Microsoft's Office software over the next few years.

For many foreigners, overcoming these obstacles may be a price worth paying. In a survey of 354 multinationals conducted by Morgan Stanley, a bank, two-thirds of foreign firms were optimistic about China in the last quarter of 2023, the most in two years and up from a trough of 46% in the first quarter of 2022. For some companies China is a place to sharpen their competitive edge: if they can make it there, they can make it anywhere. Plenty want to preserve access to China's vast market and manufacturing base. On March 21st, to much fanfare, Tim Cook, Apple's boos, opened a new flagship store in Shanghai and reiterated that "There's no supply chain in the world that's more critical to us than China." To ram the point home, days later he told an audience at the CDF in Beijing, "I love China and the people."

Yet to many Western ears, Mr Xi's commitment to openness rings increasingly hollow. His regime can repeat such bromides only so many times before you grow cynical, says a weary boss of a multinational's Chinese branch. In the long run a surfeit of foreign cynicism may end up being even more damaging to China's economy than a glut of EVs and electrolysers. ■

Disney

King of the castle

Bob Iger has defeated Nelson Peltz. Now what?

WHEN BOB IGER returned to the top job at Disney in November 2022, some anticipated a fairytale ending to the entertainment giant's troubles. In February last year Nelson Peltz, a feared activist investor, called off a campaign by his hedge fund, Trian Partners, for a shake-up after Mr Iger announced measures to slash costs and otherwise improve Disney's fortunes.

With the company's share price languishing, however, Mr Peltz returned to the warpath in October. Blackwells, another activist investor, launched a campaign of

Magic, or just fireworks?

its own. Both sought seats on Disney's board, arguing it had grown too chummy with Mr Iger and failed to find a viable strategy amid the decline of "linear" TV.

On April 3rd both activists' candidates were rejected by shareholders at Disney's annual general meeting (AGM), by what the company said was "a substantial margin". This has handed Mr Iger what he surely hopes is a decisive victory. Investors began to regain faith in Disney's boss after an earnings call in February, when he reported that losses in its streaming business, including Disney+, had narrowed sharply in the final quarter of 2023, and trumpeted splashy new initiatives including a partnership with Epic Games, a video-game developer, to incorporate Disney characters into its popular "Fortnite" franchise. The announcement that Disney would increase its dividend by 50% and repurchase $3bn of shares also went down a treat. Its share price jumped by 11% the following day, and has kept climbing since (see chart).

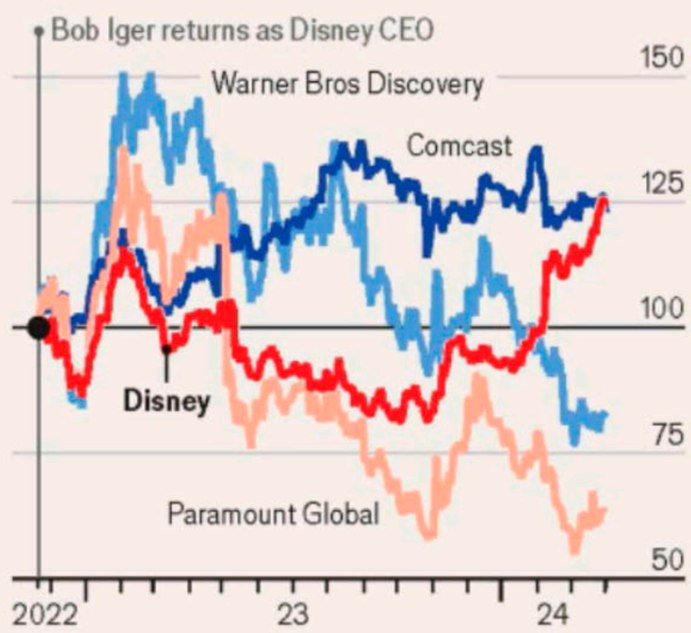
At the AGM Mr Iger declared that Disney has "turned a corner and entered a new, positive era". Yet such triumphalism is premature, for Mr Iger still has much work to do, in three areas especially. The first is to generate the "double-digit" operating margins in Disney's streaming business that he has promised investors. That will require a lot more subscribers, to provide economies of scale, which may put Mr Iger in a bind. To stem losses in the business he has jacked up prices, undermining growth. Between the third and fourth quarters of last year the number of subscribers to Disney+ (outside India) shrank by 1.3m.

What is more, over half of the $7.5bn in costs Mr Iger has pledged to slash are to come from Disney's content budget. That will hardly help the company grow, and could undermine a second of Mr Iger's promises—to restore Disney's creative magic. In his letter to shareholders from 1966, the last before he died, Walt Disney declared a disdain for sequels. Mr Iger, by contrast, is an avid fan. Of the 15 forthcoming films he mentioned in his presentation in February, all bar one were sequels, prequels, spin-offs or remakes. Mr Iger applauded a greater reliance on franchises as a "smart thing". Results at the box office, however, have been disappointing. Last year Disney lost the top spot for global cinema-ticket sales, to Universal, for the first time since 2015. On March 31st it was reported that last year's Indiana Jones film, a Disney reboot featuring an 80-year-old Harrison Ford, took in $134m less at the box office than it cost to produce.

The third promise Mr Iger must still fulfil is to find a more durable successor than his last pick, whom he then supplanted. Worryingly, three of the four directors on Disney's succession-planning committee were involved in that bungled process.

Unfrozen

Share prices, November 21st 2022=100



Source: LSEG Workspace

Already Mr Iger's two-year contract has been extended until the end of 2026.

If Mr Iger trips up, the interlopers may return. In his remarks at the AGM, Mr Peltz noted that, regardless of the outcome of the vote, he would be "watching the company's performance". The veteran activist, too, may be a fan of sequels. ■

Industrial conglomerates (1)

Chips ahoy!

MUMBAI

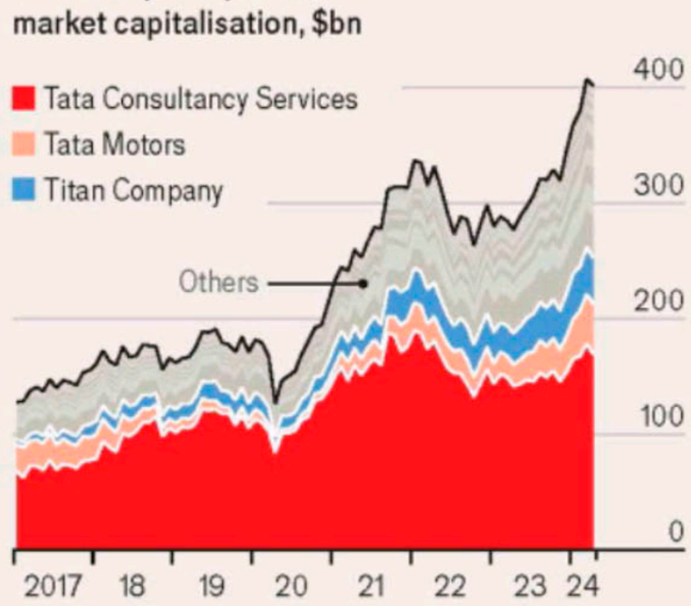
Tata Group goes into growth mode

ON APRIL 1ST diggers at large construction sites in two Indian states broke ground on a pair of semiconductor factories. The plant in Gujarat, which will cost $11bn, is to employ 20,000 people and produce 50,000 silicon wafers a month. At the $3bn facility in Assam, 27,000 workers will package chips into processing units.

The two projects are masterminded by Tata Group, India's biggest conglomerate. In Gujarat it has teamed up with Powerchip Semiconductor Manufacturing Corporation of Taiwan. In Assam Tata is going it alone. It is all a giant bet that the Indian government's dream of turning the country into a high-tech manufacturing powerhouse will materialise. And it illustrates the ambitions of Tata and its chairman, Natarajan Chandrasekaran, to move from a years-long restructuring firmly back into growth mode. "We have a big vision to play," says Mr Chandrasekaran.

Revival tour

Tata Group companies, market capitalisation, $bn



Source: LSEG Workspace

In 2017, when Mr Chandrasekaran was handed the reins of Tata Sons, the group's holding company, such a vision would have seemed preposterous. The group, which dates back to 1868, was in disarray. Mistimed acquisitions of foreign steel and car businesses were losing billions of dollars a year. A homegrown $1,300 car for the masses was a flop. Of its hundreds of affiliated firms only Tata Consultancy Services, the IT-services giant Mr Chandrasekaran ran at the time, was a real winner.

In his first three years in the top job he consolidated the corporate sprawl into 30-odd listed businesses and, importantly, gave them a new focus. In 2020 a car model, the Nexon, was reconfigured into an electric vehicle and became a smash hit. Today Tata Motors, the group's car unit, sells one in seven passenger cars in India, up from one in 20 four years ago. Some of the group's underperforming European steel mills are being shut and the domestic steel business is riding India's economic boom. An upsurge in Indian holidaymaking has transformed the hotels subsidiary from a money pit into a cash machine. Air India, bought from the government in 2022, is enjoying a similar tailwind. The combined market value of Tata's listed affiliates has shot up from around $140bn in 2017 to roughly $400bn (see chart). The group's ratio of net debt to income has plummeted from eight in 2020 to just 2.4.

This success has given Mr Chandrasekaran the confidence—and the financial muscle—to pursue new ventures, most notably in chipmaking. Past efforts to create a domestic semiconductor industry have failed. A government-led effort in the 1970s went nowhere. Promising talks between India and Intel broke down in 2007 because the government in Delhi was dragging its feet, the American chipmaker's boss grumbled at the time. Investment went to China and Vietnam instead.

Under the current prime minister, Narendra Modi, things are moving considerably faster. He hopes to lure production from China, starting with less advanced chips of the sort used in cars and appliances and then gradually moving towards the cutting edge. His government is believed to be footing around half of the capital costs of new chip factories, including ▸▸

the ones in Gujarat and Assam, with states chipping in another 20%. Even so, the projects represent a big wager by the private sector, and by Tata in particular. In January 2023 Mr Chandrasekaran said that the group's capital expenditure would amount to a staggering $90bn over five years. A slug of that would be spent directly by Tata Sons on semiconductors, where the company wants to be present in everything from design to packaging.

The idea that India can become a chip-making champion strikes some observers as bonkers. Raghuram Rajan, a former governor of India's central bank now at the University of Chicago, decries all the vast subsidies for commoditised chips, especially at a time when richer places like America and Europe are pouring billions into production at the cutting edge. India would be better off, he thinks, funding its cash-strapped engineering schools and focusing on areas that require less investment, such as chip design.

Mr Chandrasekaran disagrees. He reckons domestic buyers alone will be spending $100bn a year on chips by 2030, up from $40bn today. His firm is one of the few in India that can carry out big projects fast. It has recruited 75 executives from abroad with expertise in the chip business. Some 70% of capacity in the Assam factory, due to start production in 2025, has already been contracted for by global customers. What is a fanciful initiative for India may still be good business. ■

Industrial conglomerates (2)

Less general, more electric

How to dismantle an American icon

"THE DIFFICULTIES inherent in such a reorganisation were many and serious." In 1893 that was how Charles Coffin, the first chief executive of General Electric (GE), described merging three businesses into what became the legendary American conglomerate. More than 130 years later Coffin's latest successor, Larry Culp, must have similar feelings about doing the reverse. On April 2nd GE split into two public companies: GE Aerospace, a maker of jet engines, and GE Vernova, a manufacturer of power-generation equipment. A third, GE HealthCare, a medical-devices firm, was spun off in January 2023.

Investors are not mourning the end of GE as they, their fathers, grandfathers and great-grandfathers knew it. On the eve of the split the company's market value hovered at around $190bn. The next day the two new firms were worth nearly $200bn—and some $240bn if you add GE HealthCare (see chart). In November 2018, shortly after Mr Culp took over as boss, the whole group was worth $65bn, the least since the early 1990s. That June it had been ignominiously kicked out of the Dow Jones industrial average, an index of American blue-chip firms. In the past year both GE and GE HealthCare have handily outperformed the Dow. Their shares have also done better than those of most American spin-offs. Mr Culp says that the group could not continue as an "all-singing, all-dancing GE". Instead, GE's corporate progeny will become less general and, amid the energy transition, more electric.

For much of its history GE was synonymous with size. Under Jack Welch, the acquisitive CEO who ran it from 1981 to 2001, it became the world's most valuable company. Subsequent losses at GE Capital, its bloated finance arm, and troubles in its core industrial businesses laid the giant low. Jeff Immelt, Welch's successor, sold off GE's media, home-appliance and, belatedly, finance assets but spent $11bn on the ill-timed takeover of a power-and-grid business of Alstom, a French conglomerate, and $7bn on a stake in Baker Hughes, a purveyor of oil-industry gear. John Flannery, who replaced Mr Immelt in 2017, had the idea of spinning off the health-care division and focusing on GE's core businesses: aviation and power generation. But he was dumped barely a year into the job, as GE's share price cratered.

As a result, Mr Culp, the first outsider to run GE, inherited a mess. GE ended 2018 with a $23bn write-down of its power business (largely due to the Alstom deal), a $15bn capital shortfall in a rump reinsurance business, a net annual loss of $22bn and more than $130bn in debt. On paper his rescue plan looked similar to Mr Flannery's: hive off health, double down on aircraft engines and power. The way he went about it, though, was different.

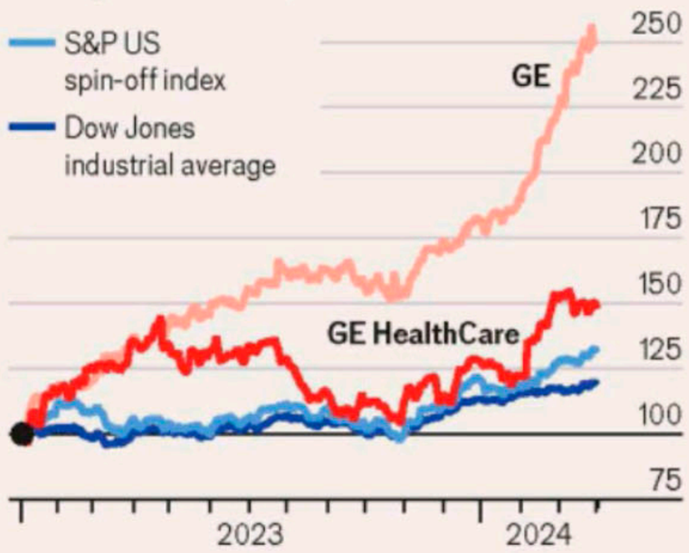
He halted his predecessor's proposed spin-off of the health-care division, realising that GE would be too weak in the short run to survive without the successful unit's income. Instead he sold GE's biotechnology business to his old employer, Danaher, another industrial group, for $21bn; accelerated the move towards cleaner energy by divesting the stake in Baker Hughes; and flogged GE's aircraft-financing unit for more than $30bn. He also cut the quarterly dividend from 12 cents a share to a cent. Taken together, these moves reduced GE's debt by some $100bn.

Critically, Mr Culp understood that reforming GE required not just changes to its structure but also to its operations. Six Sigma, a series of techniques championed by Welch that aimed to keep manufacturing defects below 3.4 per million parts, had become a barrier to innovation and was dropped. Instead Mr Culp introduced GE to "lean management", which looks for small changes that add up to big improvements over time. This approach, pioneered by Toyota in Japan, involves managers solving problems by visiting the factory floor or their customers, rather than from the comfort of their desks.

Today GE executives pepper their disquisitions with Japanese terms such as *kaizen* (a process of continuous improvement), *gemba* (the place where the action happens) and *hoshin kanri* (aligning employees' work with the company's goals). More important, Mr Culp and his underlings routinely spend a week on the factory floor alongside workers. The company ▸▸

Alternating current

Source: LSEG Workspace



*GE Aerospace and GE Vernova combined after April 2nd 2024

credits this system for improvements such as reducing the total distance a steel blade for one of its gas turbines travels during the manufacturing process from three miles (5km) to 165 feet (50 metres), and slashing the time to build a helicopter engine from 75 to 11 hours.

All this puts the two daughter firms in fighting shape to thrive as their sister, GE HealthCare, has done. In 2023 GE Aerospace and GE Vernova generated combined revenues of $65bn, up from $55bn the year before. Engines made by GE Aerospace, the group's most profitable division, which Mr Culp has chosen to run after the break-up, power three-quarters of all commercial flights. GE Vernova's gas and wind turbines generate a third of the world's electrical power.

Like many successful managers, Mr Culp also has luck on his side. Demand for passenger jets—and thus the engines that keep them aloft—is rebounding sharply from a pandemic slump. With a backlog of orders until the end of the decade, GE Aerospace expects adjusted operating profit to surge from $5.6bn in 2023 to $10bn by 2028. The turbulence at Boeing, which GE supplies with engines for the planemaker's troubled 737 MAX planes, means that airlines facing delayed deliveries of these narrowbody workhorses will need to stretch their exisiting fleet. That, points out Sheila Kahyaoglu of Jefferies, an investment bank, increases demand for GE Aerospace to keep older engines going. Last year the services business accounted for almost 70% of the division's revenues.

The winds look favourable for GE Vernova, too. Operating margins in the business rose from low single digits in 2019 to almost 8% in 2023. The International Energy Agency, an official forecaster, reckons that demand for electricity will grow by more than half by 2040 as power-hungry data centres and electric cars guzzle more of it. America is lavishing subsidies and tax breaks on renewable-energy projects. Scott Strazik, a GE veteran who will run GE Vernova, believes that this will help the company attain the scale necessary to spread the high costs of wind-turbine manufacturing, which is still lossmaking.

GE's run of good fortune may not last. Projections for traffic in the notoriously cyclical airline business may turn out to be too rosy. If Boeing doesn't pull out of its nosedive, GE Aerospace's order books could take a hit. The transition to clean energy in America, GE Vernova's largest market, has been fitful even under Joe Biden, its climate-friendly president. Should the carbon-cuddling Donald Trump return to the White House next year, he has vowed to gut green subsidies. GE's businesses, in other words, face many and serious difficulties ahead. But at least reorganisation is not one of them. ■

Big oil

System engineering

HOUSTON AND PARIS

How TotalEnergies balances growth and greenery

"TEXAS IS AN El Dorado for us, an energy El Dorado," declared Patrick Pouyanné, boss of TotalEnergies, last month at CERAWeek, the energy industry's annual shindig in Houston. He unveiled an expansion of the French supermajor's shale holdings in the south of the state, a deal intended to bolster its position as the leading exporter of American liquefied natural gas. It had earlier bought three Texan gas-fired power plants and opened a new electricity-trading desk in Houston. Meanwhile in Brazoria, a windswept county an hour's drive from the city, it has built a solar park capable of producing 380 megawatts (MW) of clean power, and of stashing some of the resulting joules in a bank of lithium-ion batteries made by Saft, its energy-storage arm. Hundreds of sheep and the odd gazelle graze among 700,000 photovoltaic panels on its 2,300 acres (930 hectares), with not a nodding donkey in sight. "You love energy here in all forms, from gas to renewables," Mr Pouyanné told the oilmen at the Houston gabfest.

This ecumenical strategy is TotalEnergies' attempt to bridge its industry's transatlantic divide when it comes to the energy transition. The French firm's big European rivals, BP and Shell, invested heavily in "electrons" businesses like wind and solar energy—until weak returns and sagging share prices forced them into embarrassing U-turns. Its American counterparts, ExxonMobil and Chevron, have instead doubled down on oil and gas, while backing "clean-molecule" businesses like hydrogen and carbon capture—and have been rewarded with higher valuations.

Mr Pouyanné thinks he can straddle both worlds. His firm will continue to invest in "System A", as he calls the oil and gas that the world still needs. Examples include its recent hydrocarbon projects in Brazil, Suriname, Namibia and the United Arab Emirates. Here Mr Pouyanné's imperatives are reducing the amount of carbon released in extracting the crude and, critically, slashing production costs, down to "less than $20 a barrel", he says. If barrels keep trading for around $90, this should spin out plenty of cash to invest in "System B", the low-carbon business that needs to grow fast if global climate goals are to be met. TotalEnergies has or is building some 5,000MW of clean-power capacity in Texas alone, making it one of America's biggest backers of such ventures. It plans to devote 30% of its capital spending, or around $5bn a year globally, to low-carbon electricity, twice as much as a typical major. By 2030 it wants to produce over 100 terawatt-hours annually, enough to light up Arizona. Perhaps a quarter of those terawatt-hours would be generated in America.

What makes TotalEnergies' green plans distinctive is that it has found a way to make good money from them. Last year its return on capital was nearly 20%, higher than all its big rivals (see chart 1). As a result, since 2019 its shareholders have enjoyed a total stockmarket return, including dividends, of nearly 80%, roughly in line with Chevron's and around twice those of BP and Shell (see chart 2).

One big reason renewable energy suffers in the marketplace is intermittency. In time lots more grid-scale batteries like those installed in Brazoria will cleanly complement its wind and solar. Until then TotalEnergies will use gas turbines as "flexible" backup to manage windless days and sunless nights. A big chunk of the profits from its low-carbon-electricity business last year came courtesy of those gassy "flexible-generation" assets.

The dual strategy is a byproduct of TotalEnergies' history. CFP, in its original French acronym, was founded 100 years ago to ensure France's energy independence. Initially that involved drilling for hydrocarbons in Iraq. This profitable business ended when the Iraqi oil industry was ▸▸

A clean sweep 1

Selected oil majors, 2023

	Return on average capital employed, %	Reserve-production ratio, years
TotalEnergies	18.9	12.0
BP	18.1	8.0
ExxonMobil	15.0	12.4
Chevron	11.9	9.7
Shell	8.4	9.6

Sources: Bloomberg; company reports

BARTLEBY

The six rules of fire drills

Please display this somewhere in your office where no one will read it. Thank you

RULE 1. The fire drill must never feel useful. It may be a proven way to help save people's lives, to say nothing of being a legal requirement in many workplaces. But it is important that people experience the exercise only as an inconvenience. The drill should take place when people are up against a deadline. It must not be timed to coincide with a long meeting, when it might come as a bit of a relief. Ideally, it should be pouring with rain. The drill can be counted a success only if enough people are rolling their eyes and muttering to themselves. (The sixth rule is essential to achieving this outcome, too.)

Rule 2. Remember that the drill is not really a drill but an exercise in begrudging consensus. When the alarm sounds, people must never just get up and leave. They must first satisfy themselves that this is not a mistake. Someone might have pressed the wrong button; that voice might yet drone "This is a test" and for once people will feel grateful.

They must then see other employees getting ready to leave. This stage involves people bobbing up and down at their desks like demented meerkats to see what their colleagues are doing. When it is clear that this is indeed a drill, people must then spend inordinate amounts of time deciding what things to take with them. What's the weather like? Should they take the laptop? Where did they put their reusable coffee flask? Should they pack a suitcase? The one thing they must not have as they leave is any sense of urgency.

Rule 3. This stage of the drill is when the fire wardens must show themselves. Only the wardens can accelerate the speed of departure from the building. This secretive group is the Opus Dei of the office but with a bit less of the fervour or sense of menace. The fire wardens have often been in the role for years; no one knows how they got the job or how to apply. They hide in plain sight: there may well be sepia photos of their younger selves on the office wall, next to an even more obscure sect known only as the "first-aiders". The wardens reveal themselves during a drill by putting on high-visibility jackets, which instantly confer on them a mysterious authority. The cabal is never seen together at other times.

Rule 4. The fire drill will produce a sense of belonging. That is because a drill will suddenly expose you to everyone who works in your building. In the normal course of events, you might briefly share a lift with people from other companies or other departments. You might glimpse their offices as the doors open and close and think how soulless they look. (They will think the same of yours.) But you never realise how outnumbered you are.

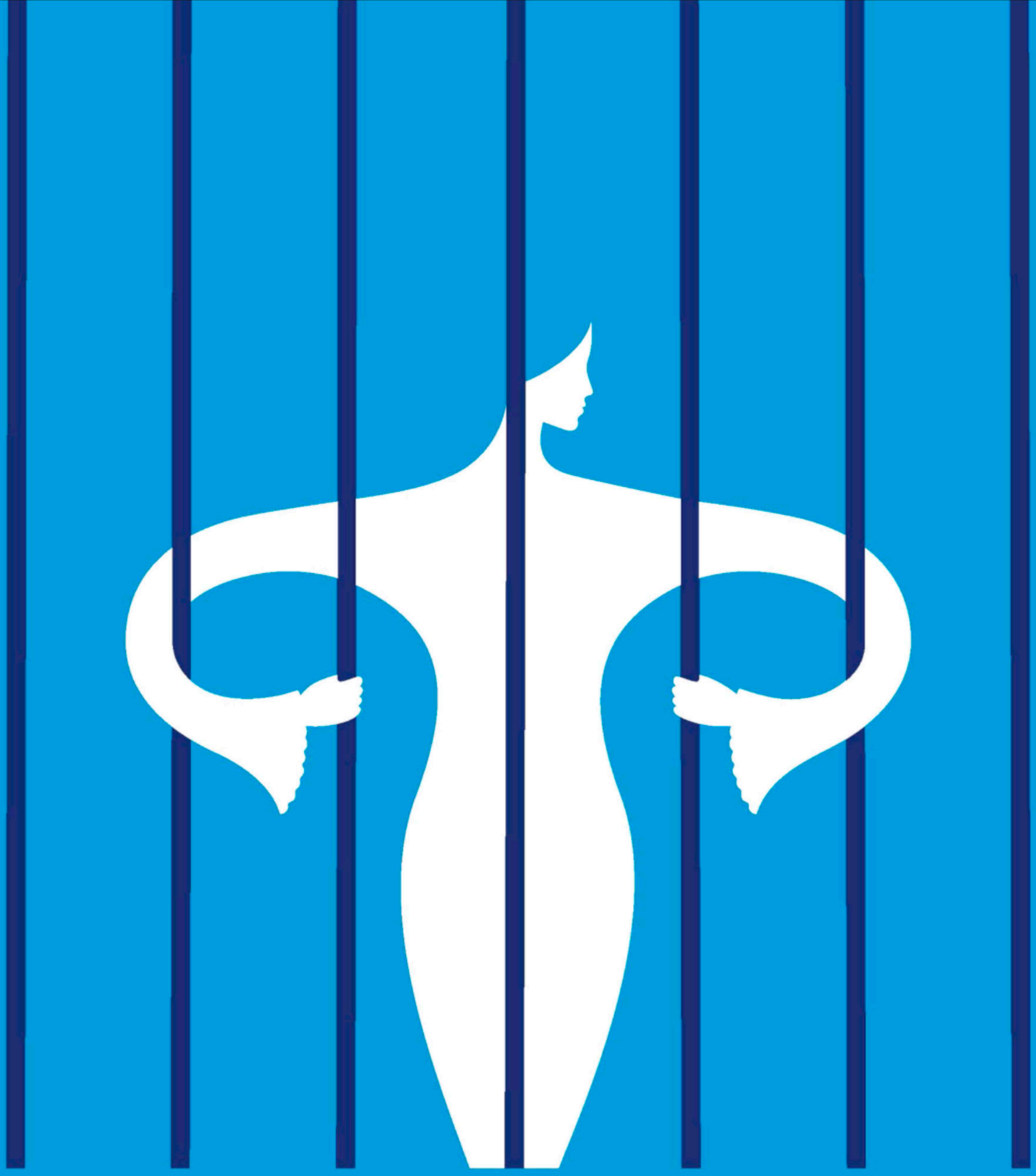
In a drill, however, strangers surround you. Stairwells fill with people, most of them also weighed down by coats, laptops and reusable coffee flasks. They spiral down below you on the way out and form long queues by the lifts on the way back. You will suddenly feel grateful for the comfort of any recognisable face. You spot someone from legal you think may be called Keith and say hello. You have never given him any thought before; in this moment of grave non-peril he is like family.

Rule 5. The assembly area is not so much a designated spot as a place of people's choosing within a ten-minute walk of your building. Your employer might have specified a place for employees to gather. They may have given it militaristic names like the "primary muster point" or the "tertiary evacuation zone". No one else will have the faintest idea where it is. A clump of people will mill about as close to the site of the notional blaze as possible. Another group will scatter in various directions in search of a coffee or an early lunch. If they walk purposefully enough, other people will assume they know where the assembly area is and follow them. As a result most of the office may accidentally end up at Starbucks.

Rule 6. Confusingly also known as the first and second rules of fire drill, you must never talk about fire drill. At some point word will spread that the drill is over and people will start to drift back to the office. Once they have returned to their desks, everyone must act as though the whole thing never happened. There must never be any reference to how it went or whether any safety lessons were learned. The fire wardens must fold away their high-viz jackets and settle back into the shadows. The work you were doing must simply be picked up where it was left. You will not speak to Keith from legal again. But you do know not to use the lifts if there is a real emergency.

nationalised in 1972. In 2021 the company returned to Iraq in a spectacular way by securing the lead role in a $27bn energy project. Mr Pouyanné thinks it edged out competitors because it offered financial and technical assistance to help Iraq generate electricity using gas that would otherwise be flared, as well as building 1,000MW of solar power. A similar approach has found favour in Libya, Mozambique and other countries with plentiful hydrocarbons and pitiful power sectors. Now, amid the energy transition, it is gaining ground even in places like America.

Some climate campaigners question this strategy. They see gas, which burns more cleanly than oil or coal, not as a bridge to a greener future but a fossil cul-de-sac. TotalEnergies' capital-spending plans suggest that view is too cynical. Of its $5bn in annual investments in low-carbon energy, 93% is going to renewables and just 7% to gas. By 2028 flexible generation's share of profits is expected to fall to a quarter, as a surging System B begins to match, and then surpass, a shrinking System A. By 2050 only 25% of TotalEnergies' sales will derive from oil and gas, according to the company's climate plan, down from 90% today. The firm envisages that electricity generation and renewables will make up half its revenues, with hydrogen and renewable biofuels making up the rest. Between now and then it will try to prove that profits and the planet need not be at odds—even for an oil major. ■



No one should go to prison for having an abortion.

40% of women live in countries where abortion is banned or restricted. In some cases, women having abortions can be prosecuted and imprisoned. Without access to safe care, 35 million people every year turn to unsafe abortions and as a result, an estimated 22,800 die.

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With friends like these

As America turns protectionist, Japan discovers the virtues of capitalism

ONE OF THE most chilling moments in America's post-war relationship with Japan occurred in Detroit in 1982. Two American car workers clubbed a Chinese-American man to death, mistaking him for a Japanese citizen they accused of stealing American jobs. A sympathetic judge fined them $3,000, with no jail time. This outrageously lenient verdict reflected a mood that later extended to the highest level of government. Fearful of being overtaken by Japan as the world's economic superpower, America wielded the crowbar. It imposed trade restrictions, sought to pry open Japan's domestic markets and led international efforts to reduce the value of the dollar against the yen. Only after Japan's asset-price bubble burst in the 1990s did America leave it alone.

You would think a new bout of protectionism in America, most recently the bipartisan attempt to block Nippon Steel's $15bn acquisition of US Steel under the guise of safeguarding American jobs, would elicit a sense of *déjà vu* in Japan. But it is more complicated than that. In recent years one of the most important strategic partnerships in the world has done a switcheroo. Japan is embracing shareholder-friendly, pro-market reforms that have long been America's thing. America is adopting the sort of industrial policies and protectionism that once defined Japan. This reveals a lot about the contradictions America faces as it attempts to build global alliances to counter China while pursuing business autarky at home. Japan's approach makes more sense.

Japan's transition in just the ten years since Schumpeter lived there in the early 2010s is remarkable—and not merely big-picture stuff such as rising interest rates and the surging stockmarket. As Japan struggles to offset the economic headwinds of depopulation, things are changing on the ground, too. Ask an optimist, and several aspects of Japan's lost decades are fading from view.

Sayonara deflation: prices are rising and Japan's large firms recently agreed to the biggest wage increase in 33 years. *Sayonara* xenophobia: immigrant employment, though still small by Western standards, is going up. *Sayonara* cosy capitalism: firms, though still awash with cash, are targeting higher returns, conducting more takeovers and reaping the benefits of shareholder activism. "It's endogenous. This is the elite of Japan saying if we don't sweat our assets, we won't be around," says Jesper Koll, a veteran Japan-watcher. As usual Warren Buffett, who bought big stakes in Japan's trading houses in 2020, invested shrewdly.

There are several *hisashiburis*, or "long time no sees", too. Japan is a stronger trading power, with exports surging for the past three years (thanks in part to a cheap yen). Sales by its most valuable company, Toyota, have risen sharply in America this year; many car buyers favour the firm's hybrid models over rivals' electric vehicles (EVs). Japan is enjoying an industrial renaissance, especially in high-tech products such as semiconductors. In February TSMC, the world's biggest chip manufacturer, opened its first factory in Japan less than two years after construction started. It has suffered big delays trying to do the same in America.

So what does Japan make of America turning Japanese, in the bad old sense? The first blow to trust came in 2017 when Donald Trump withdrew America from the Trans-Pacific Partnership, a trade treaty that America, Japan and ten other countries had painstakingly crafted partly to counterbalance China. Mr Trump's successor, Joe Biden, doubled down on an America-first industrial policy. His Inflation Reduction Act (IRA) discriminated against firms from Japan and other places that lacked a free-trade treaty with America (Japan later signed a critical-minerals deal that provides its EVs with some of the tax incentives they had been denied.) Mr Biden's opposition to the trans-Pacific steel merger has been a slap in the face. Not only were his protectionist arguments spurious. They came just as lawmakers were proposing to add Japan to a whitelist of strategic allies permitted to bypass America's strict foreign-investment rules.

Japan's economy ministry will not go on the warpath against America as the Commerce Department did against Japan in the 1980s. For all its pro-market progress it is no paragon of capitalist virtue, deploying industrial policy to promote clean energy and chipmaking. America's giant economy is growing fast, so Japan cannot afford to be too huffy. Its firms have pledged to invest billions in America to take advantage of the IRA. As for Nippon Steel, expect it to keep its head down and hope the merger brouhaha blows over after the presidential election in November. If Mr Biden's pro-jobs stance helps him defeat Mr Trump, a protectionist to the marrow of his bones, Japan will sigh with relief.

Yet the relationship is no longer one-sided. In the past America was not just Japan's most important export market but also a guarantor of its safety under the US-Japan Security Alliance, a defence treaty. That protection remains vital. In recent years, though, as threats from China and North Korea have grown, Japan has taken more of its defence into its own hands. It has decided to spend vastly more on powerful new weapons, such as cruise missiles. Its tech industry is hoping to play a bigger role in the West's military supply chains. On April 10th Mr Biden and Japan's prime minister, Kishida Fumio, will reportedly unveil the biggest upgrade to the security pact in decades when they meet at the White House.

The Tokyo consensus

America, for its part, needs Japan not just as a military partner in Asia. As Peter Tasker, another long-time Japan-watcher, puts it, Japan is increasingly seen as the "non-China" leader in the region, and America relies on it as an economic counterweight to China. As more Asian countries move into Japan's orbit, with luck they will emulate its new-found pro-trade pragmatism. That, after all, is the true American way. ■

Finance & economics

New productive forces

Hype and hyperopia

HONG KONG

How China's leaders plan to overtake America

LAST YEAR Xi Jinping, China's president, paid a visit to Heilongjiang in the country's north-east. This province, part of the industrial rustbelt, exemplifies the problems besetting China's economy. Its birth rate is the lowest in the country. House prices in its biggest city are falling. The province's GDP grew by only 2.6% in 2023. Worse, its nominal GDP, before adjusting for inflation, barely grew at all, suggesting it is in the grip of deep deflation.

Never fear: Mr Xi has a plan. On his visit, he urged his provincial audience to cultivate "new productive forces". That phrase has since appeared scores of times in state newspapers and at official gatherings. It was highlighted in last month's "two sessions", annual meetings of China's rubber-stamp parliament and its advisory body. In the preface of a new book on the subject, Wang Xianqing of Peking University likens the term to "reform and opening up", the formula that encapsulated China's embrace of market forces after 1978. Those words "shine" even today, he wrote, implying that "new productive forces" will have similar staying power.

What does the phrase mean? Chinese officials are hunting for ways to power the country's economy. For years its productive forces drew on the mobilisation of labour and accumulation of capital. Its workforce grew by 100m people from 1996 to 2015. Its stock of capital rose from 258% of GDP in 2001 to 349% two decades later, according to the Asia Productivity Organisation. After the global financial crisis of 2007-09, capital accumulation often took the form of new property or infrastructure.

But China's workforce is now shrinking and demand for property has slumped: fewer people are moving to China's cities, speculative gains on real estate are no longer assured and potential homebuyers are reluctant to buy flats in advance in case distressed developers run out of cash before building is complete. The property downturn has hurt consumer confidence and deprived local governments of crucial revenues from land sales. Even after China abandoned its strict covid-19 controls, the economic recovery has been muted and uneven. Spending has not been strong enough to fully employ China's existing productive forces. As a consequence, according to one measure, deflation has persisted for three quarters in a row.

At China's stage of development, economies typically pivot towards services. Yet the government's heart lies elsewhere. The pandemic boosted demand for China's manufactured goods, from surgical masks to exercise bikes. America's export controls on "chokepoint technologies" have created a need for homegrown alternatives, from lithography machines to aviation-grade stainless steel. China's 14th five-year plan, which spans 2021-25, promised to maintain manufacturing's share of GDP, which had declined from almost a third in 2006 to just over a quarter in 2020.

In its quest for a sophisticated, but self-contained, manufacturing system, China employs a variety of helpful policies. Its Ministry of Education, for example, recently approved a new undergraduate concen- ▸▸

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tration in high-end semiconductor science and engineering. Spending on more explicit industrial policies, including subsidies, tax breaks and cheap credit, amounted to 1.7% of GDP in 2019, according to the Centre for Strategic and International Studies, a think-tank—more than three times the percentage spent by America.

"What China really wants to be is the leader of the next industrial revolution," says Tilly Zhang of Gavekal Dragonomics, a consultancy. That will require it to upgrade traditional industries, break foreign strangleholds on existing technologies and forge a new path in industries of tomorrow. Although the central government's ambition is impressive, even unsettling, it cannot succeed without the help of local governments, which are short of cash, and private entrepreneurs, who are short of confidence. As such, the new slogan may betray a damaging hyperopia—long-sightedness that is blinding the leadership to more immediate economic concerns.

The owl spreads its wings

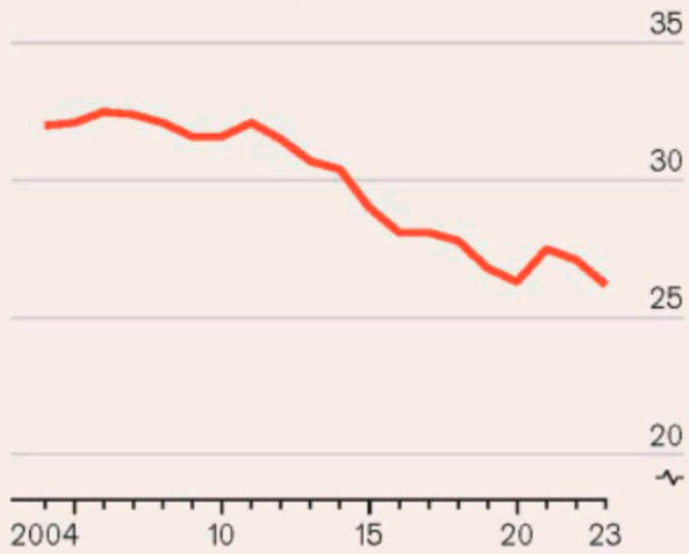
To Barry Naughton of the University of California, San Diego, who confesses to reading some Hegel in his younger days, the phrase "new productive forces" evokes the "dialectical" idea that an accumulation of quantitative changes can result in a qualitative break or sudden leap, as Hegel put it, much like when an incremental increase in temperature turns water into steam. Marx, meanwhile, noted that when new productive forces achieve sufficient weight in the economy, they have the capacity to remake the social order: "The handmill gives you society with the feudal lord," he wrote, "the steam-mill, society with the industrial capitalist." New productive forces, then, can be a big deal.

In presenting the concept, Mr Xi has said that the test for new productive forces will be improvements in "total factor productivity", a term lifted not from Marx, but from mainstream economics. It refers to increases in output that cannot be attributed to increases in measurable inputs, such as physical and human capital. In mixing Marxist and neoclassical concepts, new productive forces are a "strange hybrid beast", says Mr Naughton.

According to Mr Xi, the new productive forces will flow from the application of science and technology to production. The phrase is a signal that China's technology push should be even more ambitious than it is today, and more tightly integrated into economic production. China's leaders have promised a "whole of nation" effort to boost technological self-reliance. The central government's budget, unveiled in March, increased annual spending on science and technology by 10%, the largest percentage increase of any division. Frugal innovation, this is not.

Time for a turnaround

China, manufacturing as % of GDP



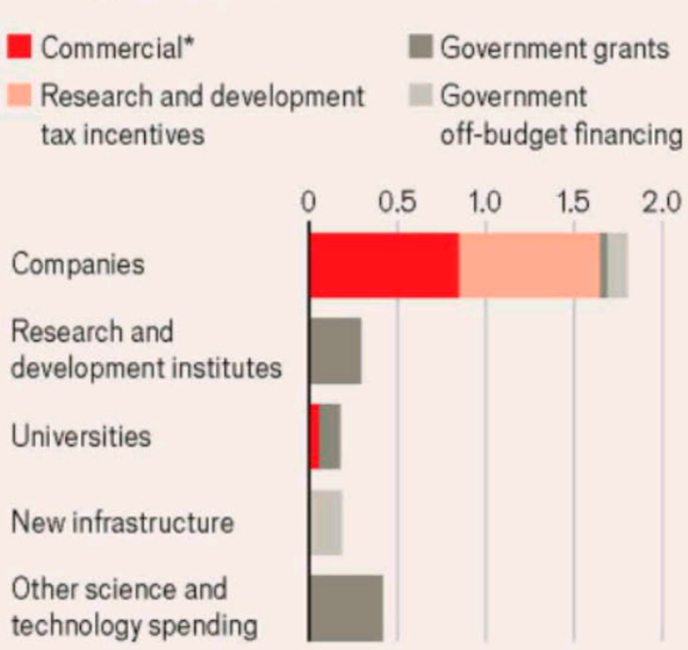
Source: National Bureau of Statistics

Nor is it China's first assault on the problem. In 2006 a 15-year plan set national targets to raise research-and-development (R&D) spending, reduce dependence on foreign technology and increase technology's contribution to growth. It also identified 16 "megaprojects", such as building China's own large passenger aircraft and landing a probe on the moon. These were largely attempts to replicate existing technologies. In 2010, after the global financial crisis, China changed tack, lavishing some of its heavy stimulus on a variety of "strategic emerging industries", including new kinds of information technology, renewable energy and electric vehicles (EVs)—many of which were still embryonic.

Six years later, China shifted emphasis again. Its "innovation-driven development strategy" expressed faith that the world was in the midst of an industrial revolution. Advances in digital technologies, the internet of things, green tech and artificial intelligence (AI) promised breakthroughs across the economy. Rather than pick a miscellany of emerging industries, China's new strategy emphasised this cluster of mutually reinforcing technologies. China aimed to become a "world power" in innovation by the middle of this century. By 2020 it was spending almost 2.9trn yuan ($420bn, or 2.8% of GDP) on science and technology, according to Rhodium Group, a consultancy. The government's contribution exceeded 60% if generous tax breaks are included. Of the recipients, a sixth ended up with universities or research institutes. Roughly 60% flowed to companies.

A lot of moonshots

China, sources of science and technology funding, 2020, yuan trn



Source: Rhodium Group *Including foreign

Mr Naughton has called China's innovation strategy "the greatest single commitment of government resources to an industrial-policy objective in history". What does the country have to show for it? The results have so far been better than any middle-income country could expect. But they are not quite as impressive as China's leaders might have hoped.

In e-commerce, fintech, high-speed trains and renewable energy, China is at or near the frontier. The same is strikingly apparent in EVs, where success helped China last year to become the world's biggest exporter of cars. In a list of 64 "critical" technologies identified by the Australian Policy Research Institute, a think-tank, China leads the world in all but 11, based on its share of the most influential papers in the fields. The country is number one in 5G and 6G communications, as well as biomanufacturing, nanomanufacturing and additive manufacturing. It is also out in front in drones, radar, robotics and sonar, as well as post-quantum cryptography.

In addition, China has made good progress in measures of a country's innovation "ecosystem". The Global Innovation Index, published by the World Intellectual Property Organisation, combines about 80 indicators, spanning infrastructure, regulations and market conditions, as well as research effort, patent awards and citation counts. A middle-income country with China's GDP per person would expect to rank in the 60s. China ranks 12th.

The economic impact of these achievements is harder to measure. China's list of "strategic emerging industries" has kept evolving since its introduction in 2010, making it tough to track progress. Two members of China's National Bureau of Statistics once lamented that the criteria for inclusion, especially at the level of products, are "vague". How to know if a boiler counts as "energy saving" or a composite material counts as "high performing"? Nonetheless, China's statisticians estimate that strategic emerging industries accounted for 13.4% of GDP in 2021, up from 7.6% in 2014 but below the original target for 2020 of 15%. By comparison, the value added by property building and services (ignoring upstream links to steel, iron-ore and other such industries) was about 12%.

Although these gains are impressive, China's leaders are not content. They have been alarmed both by America's technological embargoes and its recent techno-

logical triumphs. Sweeping export controls on the sale of chips and chipmaking equipment have revealed China's dependence on foreign components, software and equipment. America's advances in AI have also prompted reflection. AI was an industry in which China thought it had an edge. The country's leaders were shocked by the arrival in 2022 of ChatGPT, a large language model developed by OpenAI.

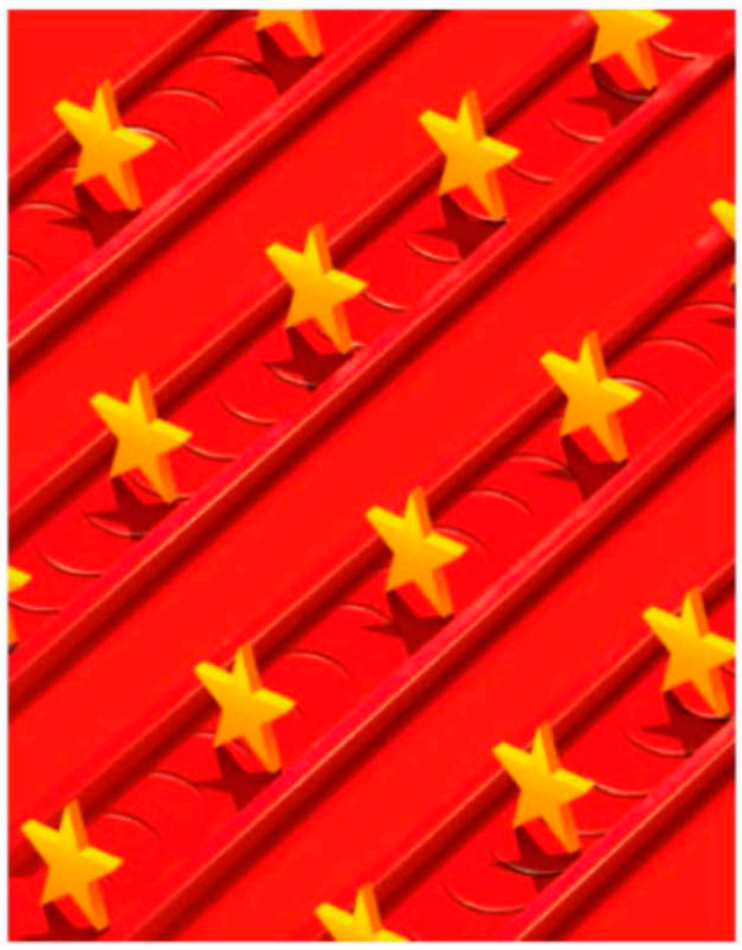
China's progress has also been hurt by its own leaders. They cracked down on many of the country's most advanced tech firms in 2021, accusing them of mishandling data, thwarting competition and exploiting gig workers. This regulatory storm targeted consumer-facing "platform" companies, such as Alibaba and Meituan, rather than advanced manufacturers or other firms in "hard tech". However, the damage to investor confidence was hard to contain. The disfavoured platform companies, with their huge troves of data, are also big investors in many frontier technologies, such as AI, which China's leaders are keen to foster. The country's large internet firms cut their R&D spending by almost 7% in the first half of 2023, compared with a year earlier, according to Rhodium.

Scientific socialism

Total-factor productivity growth—Mr Xi's preferred test of new productive force—has also slowed. The tech programme China introduced in 2006 implied that its contribution to growth should rise to 60%. Instead, it has fallen to less than a third, according to Louis Kuijs of S&P Global Ratings, a credit-rating agency. China is thus suffering from its own version of the "Solow paradox": you can see a new technological age everywhere but in the productivity statistics. These setbacks and shortcomings may explain the perceived need for a fresh slogan to shake things up.

The country's innovation push now seems split into three. First, it seeks to replicate "chokehold" technologies. A second goal is to invent technologies the rest of the world is yet to create. In January government ministries issued a list of "future industries", many of which are even more pathbreaking than the strategic emerging industries of the past. They include photonic computing, brain-computer interfaces, nuclear fusion and digital twins—simulacra of patients that doctors can monitor for illnesses that might arise in their real-life counterparts. The government is encouraging laboratories and research institutes to spend more than half of their basic funding on scientists under 35 years of age, in the belief they are more likely to make the breakthroughs the country needs.

These moonshots could be seen as a folly China can ill afford—a distraction from the dogged pursuit of self-reliance, which requires homegrown versions of



technologies that China can no longer count on importing from abroad. But according to Ms Zhang of Gavekal, China's leaders hope that futuristic industries will contribute indirectly to the country's technological sovereignty by giving it "bargaining chips" in the tech battles ahead. If America threatens to cut off China's access to a vital input, China can retaliate in kind.

Chinese commentators often talk about "overtaking at the curve". China's success in EVs, after its longstanding failure to displace incumbent makers of traditional vehicles, demonstrates that it can sometimes be easier to make advances in fields that are not already occupied by well-entrenched incumbents. According to Jie Mao of the University of International Business and Economics in Beijing and his co-authors, China's science-and-technology policies from 2000 to 2012 boosted productivity most in industries in ferment, rather than in those that had reached maturity either at home or abroad. In fighting a guerrilla war, Mao Zedong famously believed in occupying the countryside before advancing on the cities. In the same way, China may be marching into wilder and woollier areas of technological discovery, where its long-entrenched adversaries have a smaller advantage.

Big bucks, bigger bang

Source: Global Innovation Index, 2023 *Purchasing-power parity

A third objective is to upgrade existing industries. "Even the most traditional agriculture can form new productive forces," Wang Yong of Peking University has argued, so long as it employs revolutionary technologies. He cites automated planting or selective breeding using big data. At the two sessions, the annual meetings of China's parliament and its advisory body, a delegate from a prominent state-owned distillery even argued that the new productive forces can be found in hard spirits.

The pursuit of these goals will be expensive. One lesson of the past decade is that lots of money cannot guarantee a Hegelian transformation of production. But a lack of spending will surely preclude one.

It must therefore worry China's leaders that local governments' budgets are stretched and animal spirits are low. In the past, much of the money for China's tech push has come from local-government funds that raise money from land sales and "special bonds". Their revenues fell by more than a fifth from 2020 to 2023.

When the economy is booming and local authorities are flush, they are at liberty to invest in ventures that may not pay off for five or ten years, points out Matt Sheehan of the Carnegie Endowment for International Peace, a think-tank. In 2010, for example, growth was rebounding and stimulus money could flood into EVs, solar panels and other evolving technologies. But for local governments in today's more straitened times, "firefighting is going to end up overwhelming attempts to think long term", he says. Firms will be urged to invest in projects with short-term payoffs. They may also be pestered and harassed for taxes and fees to help their provincial or municipal patron balance its books.

At this year's two sessions, Li Qiang, China's prime minister, set out the country's "major tasks" for the year ahead. First on Mr Li's list was "to modernise the industrial system" and develop "new quality productive forces". Expanding domestic demand, which is necessary to dispel deflation, ranked only third. If the mood and markets do not revive, local governments will struggle to refill their coffers and private investment may fall short. Mr Xi is determined to reinvent China's economy. To do so, he needs to reinflate it first. ■

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Policy innovation

A lovely wall

WASHINGTON, DC

The Federal Reserve is cleaning up its money-printing mess

AT THIS POINT, almost everyone in global markets is familiar with the notion of higher-for-longer interest rates. Soon, they are likely to meet another concept as important for understanding central-bank policy: less-for-longer quantitative tightening (QT). This phrase describes how the Federal Reserve intends to continue reducing its assets to undo its huge bond purchases during the covid-19 pandemic. It hopes that a less-for-longer approach will ultimately leave it with a smaller balance-sheet than would otherwise be the case.

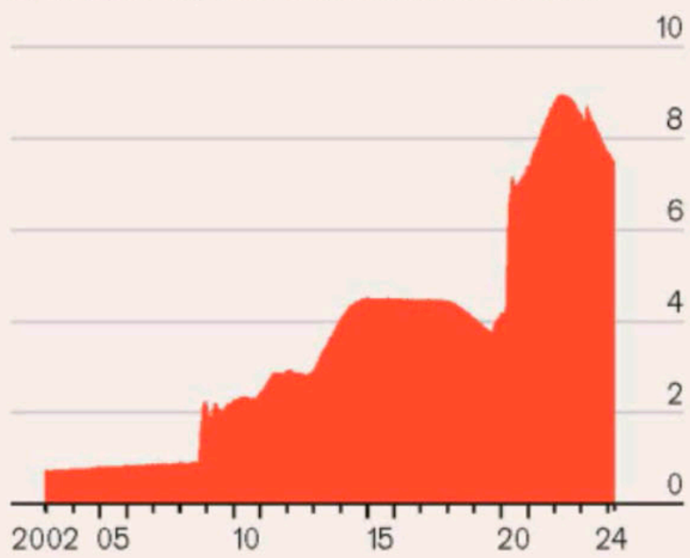
This may all seem quite technical. Indeed, in one metaphor much liked by Fed officials, tracking QT should be as interesting as watching paint dry. But the very dullness—if it remains that way—has crucial implications, because it would help to make balance-sheet expansion and contraction a staple in central banks' tool kits for staving off financial crises. Although other monetary authorities are also in the midst of QT, the Fed plays a dominant role in this experiment as the central bank for the world's biggest economy.

The Fed has already reduced its assets by about 16% to $7.5trn since the start of this round of QT in mid-2022—a slightly bigger reduction than its previous attempt at QT from 2017 to 2019 in the wake of the global financial crisis of 2007-09 (see chart). Yet its balance-sheet remains about 80% larger than in early 2020. Shrinking it further would give the Fed more scope to expand it again by purchasing bonds (often described as printing money) when the next financial maelstrom arrives. Managing to do so without crashing markets would also help answer critics who view quantitative easing (QE) as a cause of high inflation and bubbly asset prices.

No one, including Fed officials, knows precisely the right size for the central bank's holdings. The crucial measure is not the assets on its balance-sheet but its liabilities—specifically, the reserves held by commercial banks, which rise as a counterpart to the central bank's bond purchases during QE. The Fed's goal is to return banks to "ample" reserves, down from their "abundant" level today. Before the pandemic, such reserves came to about 10% of their assets. Now, they are about 15%. Given increased needs for liquidity, in part owing to stricter financial regulation, economists at Goldman Sachs, a bank, think a good level would be about 12%. This would imply that the Fed may want to shrink its balance-sheet by another $500bn.

No tantrum yet

United States, Federal Reserve assets, $trn



Source: Federal Reserve

Without any fixed target, the Fed is allowing itself to be guided by market signals. In particular, it is watching whether overnight financing rates for banks trade above the rate that it pays on their reserve balances. This would be an indication that liquidity conditions have become much tighter. Money-market ructions in the autumn of 2019, including surging short-term financing costs, led the Fed to bring its previous round of QT to a screeching halt. This time, it has avoided such instability.

Having got this far, officials now want to slow their asset reduction, betting that doing so will minimise the risk of market disruption and thus, over a longer period, maximise their balance-sheet shrinkage. With Jerome Powell, the Fed's chairman, promising last month to start "fairly soon", a fair conjecture is that the Fed will lay out plans for tapering QT after its next meeting on May 1st and begin to do so in June. Currently, the Fed is not selling securities but letting up to $95bn roll off its balance-sheet each month. A tapered QT may see it aim for a roll-off of roughly half as much.

The corollary of less-for-longer QT is that the Fed will probably continue to reduce its assets for the rest of this year, which means it may be shrinking its balance-sheet (ie, monetary tightening) at the same time as it cuts interest rates (ie, monetary loosening). Although that may sound contradictory, investors should in theory price in much of the impact of tapered QT as soon as the Fed announces it.

In any case, the big picture is just how few ripples the central bank's balance-sheet reduction has caused so far—a contrast with both the turbulence of 2019 and the "taper tantrum" of 2013, when the Fed first discussed plans for trimming asset purchases. "People are getting more used to thinking about balance-sheet tools, and the Fed is more used to communicating them," says William English, a former Fed economist. Watching paint dry is boring. But a well-painted wall can be lovely. ■

Crypto bankruptcy

The $10.6bn question

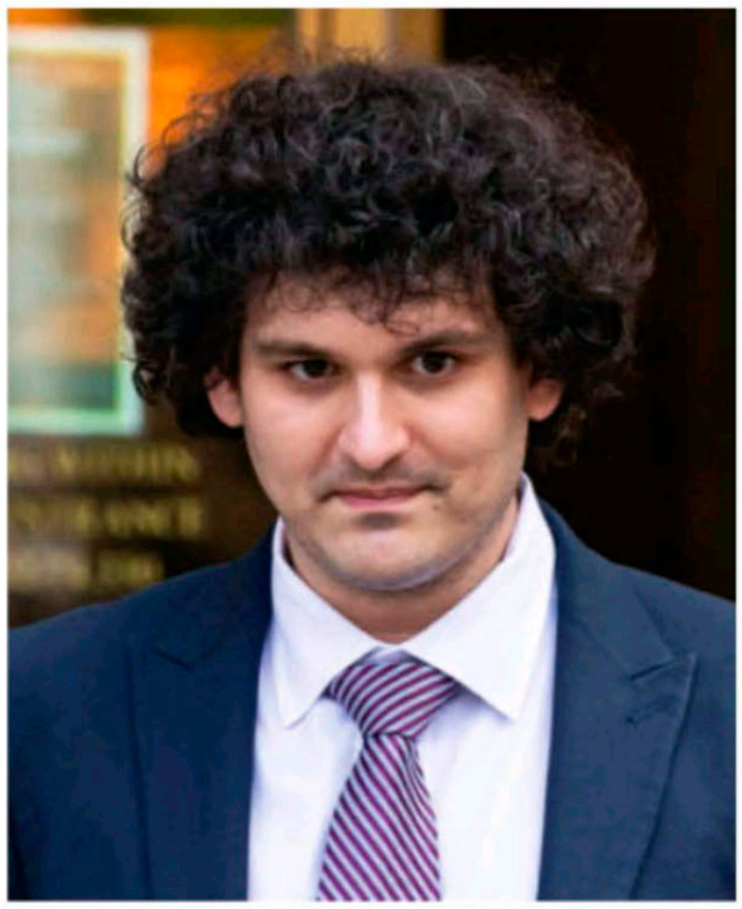
How much will FTX customers get back?

IN THE DAYS after the fall of his crypto exchange, Sam Bankman-Fried opened a Google Doc and began to type. Beneath the title "probably bad ideas" he listed potential strategies, which included coming out as a Republican and arguing that "SBF died for our sins". Mr Bankman-Fried ultimately decided against both, but there is one fiction he never let die. He has always claimed FTX was, in fact, solvent and could repay the $10.6bn it owed customers.

Mr Bankman-Fried lost his empire in November 2022, but it was not until March 28th that he learned his fate: 25 years in prison. FTX's customers-turned-creditors are still waiting. The bankruptcy is messy, extending to over 100 entities with assets lawyers say are "hopelessly" mingled. So it was surprising to possibly everybody except Mr Bankman-Fried himself when FTX told a court in January that it should be able to repay its 36,000 customers in full.

FTX is good for the cash not because it was always solvent, but because administrators have clawed back assets that its last chief executive frittered away, argues John Ray III, the firm's current boss. Rising crypto prices have also helped. Mr Ray's team has located $7bn in assets, including luxury homes and private jets. They reckon that another $16.6bn flowed out of the company before its collapse—a third of which went to insiders and affiliates—and some of which may be clawed back.

Mr Ray's success in tracking down FTX's cash has made claims on its estate a ▸▸



Jesus Christ

hot commodity. Imposters have pumped up their total value to $23.6qn (quintillion, that is). Although legitimate claims on FTX's debt first traded at as low as one-tenth of their face value, reflecting expectations they would not be repaid, these certificates have almost entirely recovered their value. One customer is trying to regain $166m of claims in court, having sold them for a third of their face value.

Mr Ray only has to repay, without interest, the dollar value of customers' crypto accounts at the time FTX filed for Chapter 11 protection on November 11th 2022. By then, bitcoin tokens had lost a fifth of their value since Mr Bankman-Fried had barred withdrawals three days earlier. And crypto has since been on a tear. The price of solana tokens, FTX's largest holding, has increased eleven-fold; bitcoin has more than tripled in value. This has led some creditors to sue for payment in tokens, rather than dollars. They claim the tokens are their property under FTX's terms.

Yet FTX does not have the tokens they seek. Mr Ray says there were only 105 bitcoins left on the exchange when he took over, against customer entitlements to nearly 100,000. In truth, customers seem to have made a lucky escape. Their repayment relies on FTX's owners losing out on their $12bn claim, the federal government forgoing $43.5bn in fines and taxes, and Mr Ray being allowed to sell what remains. None of this would have happened if FTX really had been solvent. ■

BUTTONWOOD

Advice for Mr Modi

A policymaker's guide to building a global currency

SEVENTY YEARS ago the Indian rupee was often found a long way from home. After India gained independence from Britain, the currency remained in use in sheikhdoms across the Arabian Sea. Until as late as 1970, some employed the Gulf rupee, a currency issued by India's central bank.

Today the picture is rather different. The rupee accounts for less than 2% of international-currency transactions, even though the Indian economy is the world's fifth-largest. Narendra Modi, India's prime minister, would like to see the currency span the globe once again. Speaking at the 90th anniversary of the Reserve Bank of India on April 1st, Mr Modi told the central bank's policymakers to focus on making the rupee more accessible. Historically, however, national leaders have been a lot more likely to express enthusiasm for the idea of making their currency a global one than to enact the reforms required to do so.

Although the American dollar is the undisputed king of currencies, there are many with a global role of their own. The euro, the British pound, the Swiss franc, and the dollars of Australia, Canada, Hong Kong and Singapore are all examples. These currencies are found in foreign reserves and private portfolios worldwide, and used for both trade and financial transactions. In theory, there is no reason why the rupee should not join the illustrious group.

Having a widely used currency brings sizeable benefits. Demand from overseas investors lowers financing costs for domestic companies, which are no longer compelled to borrow in foreign currencies. Such demand also reduces exchange-rate risks for exporters and importers, who do not need to convert currencies so often when trading, and enables the government to reduce the size of its foreign-exchange reserves.

Some of the foundation stones of an international currency are being laid in India. The country now has assets that foreigners want to buy, making the rupee a potential store of value overseas. In September JPMorgan Chase, a bank, announced that it would include Indian government bonds in its emerging-market index. Bloomberg, a data provider, took the same decision last month. The explosive performance of the country's stocks, which are up by 37% in dollar terms over the past year, has piqued global interest.

The rupee is also increasingly a unit of account and a medium of exchange for foreigners. Banks from 22 countries have been permitted to open special rupee-denominated accounts, without the usual exchange limits. In August India made its first rupee payment for oil, to the Abu Dhabi National Oil Company.

Yet China shows how far India has to go. Although Chinese policymakers have been trying to make the yuan a global currency for more than a decade, it still accounts for less than 3% of international trades made via SWIFT, a payments network, outside the euro zone, despite the fact that China accounts for 17% of global GDP. Moreover, 80% of such international yuan transactions occur in Hong Kong. China's relatively closed capital account, which prevents investments from flowing freely across its borders, is the main obstacle to wider use of its currency. India's capital account is less closed than it once was, but is still far more sheltered than that of any of the countries with a global currency.

Japan provides a better example. In 1970 it accounted for 7% of global GDP—more than the 4% it does now—and its companies were beginning to make a mark abroad. But the yen was a non-entity. That changed over the following decade: in 1970, 1% of Japan's exports were invoiced in yen; by the early 1980s, 40% were. In 1989 the yen made up 28% of all foreign-exchange transactions. It still accounts for 16% today.

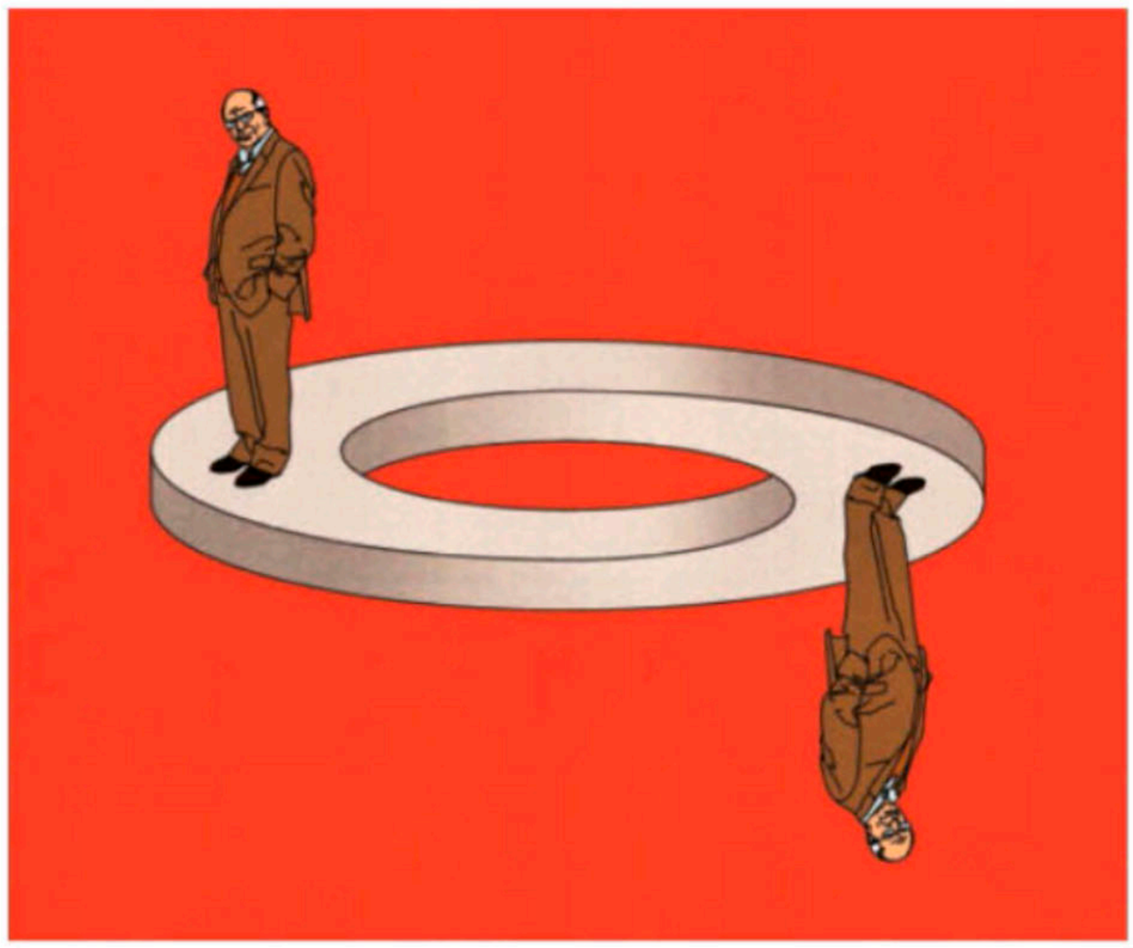
To make the leap to global-currency status, Japan's leaders had to transform the country's economy. They allowed foreigners to hold a wide range of assets, deregulated big financial institutions, and peeled back controls on capital flows and interest rates. These changes disrupted Japan's export-oriented economic model, and undermined the power of the country's bureaucrats.

Changes just as far-reaching—and uncomfortable—will be required for any country that now wants to join the top table. Few seem to have the stomach for them at present. Indeed, without American pressure and the threat of tariffs, Japan itself might not have made such reforms. America is not about to lean on India in the same way. The desire for change will have to come from within.

FREE EXCHANGE

Nobel gossip

Daniel Kahneman exposed cognitive illusions—but could not dispel them



WINNERS OF THE Nobel prize in economics tend to sprinkle their papers with equations. Daniel Kahneman, who died on March 27th, populated his best-known work with characters and conundrums. Early readers encountered a schoolchild with an IQ of 150 in a city where the average was 100. Later they pondered the unfortunate Mr Tees, who arrived at the airport 30 minutes after his flight's scheduled departure, and must have felt even worse when he discovered the plane had left 25 minutes late. In the 1970s readers had to evaluate ways to fight a disease that threatened to kill 600 people. In 1983 they were asked to guess the job of Linda, an outspoken, single 31-year-old philosophy graduate.

Kahneman used such vignettes to expose the seductive mental shortcuts that can warp people's thoughts and decisions. Many people, for example, think it more likely that Linda is a feminist bank-teller than a bank-teller of any kind. Presented with two responses to the disease, most choose one that saves 200 people for certain, over a chancier alternative that has a one-third chance of saving everyone and a two-thirds chance of saving no one. But if the choice is reframed, the decision is often different. Choose the first option, after all, and 400 people die for sure. Choose the second and nobody dies with a one-third probability.

Teasing questions came easily to Kahneman, even in his sleep, according to "The Undoing Project", a book by Michael Lewis. Some sprang from his teaching, which was not confined to ivory towers. He once explained the idea of "regression to the mean" to flight instructors in Israel's air force. The reason pilots tended to improve after a sloppy manoeuvre was not because the instructor screamed at them, but because the chances of an improvement are higher if the prior performance was unusually bad.

Kahneman was a harsh grader of his own incorrigible self, attentive to his own lapses. One of his early hit papers exposed the kind of methodological muddles to which he himself was vulnerable, such as the misplaced confidence that an outlier, like a child with an IQ of 150, would not skew even a small sample.

Kahneman also had a lifelong—and life-preserving—interest in gossip. His childhood, as the son of Lithuanian Jews living a comfortable but edgy pre-war existence in Paris, was full of talk about other people, he once wrote. Jews in Europe had to "assess others, all the time," a friend of his told Mr Lewis. "Who is dangerous? Who is not dangerous?...People were basically dependent on their psychological judgment."

Gossip was both a source of his work and an intended target. His bestselling book, "Thinking Fast and Slow", was written not for decision-makers, but for "critics and gossipers". Decision-makers were often too "cognitively busy" to notice their own biases. Pilots could be corrected by observant co-pilots and overconfident bosses might be chastened by whispers around the water-cooler, especially if the whisperers had read Kahneman's book.

To spread psychological insight, Kahneman once tried to add a course on judgment to Israel's school curriculum. He expected the project would take a year or two. It took eight, by which time the ministry of education had lost enthusiasm; a humbling example of what he and Amos Tversky, his frequent co-author, called the "planning fallacy". He had more success inveigling psychological wisdom into the well-guarded realm of economics, which had clung to a thin but tidy model of human decision-making.

How did he do it? One answer is that he teamed up with Tversky, whose elegant mind was as ruthlessly tidy as his desk. They incorporated the cognitive illusions they had discovered into a model called "prospect theory". According to this theory, people's well-being responds to changes in wealth, more than levels. The changes are judged relative to a neutral reference point. That point is not always obvious and can be recast: a bonus can disappoint if it is smaller than expected. In pursuit of gains, people are risk averse. They will take a sure win of $450 over a 50% chance of winning $1,000. But people gamble to avoid losses, which loom larger than gains of an equivalent size.

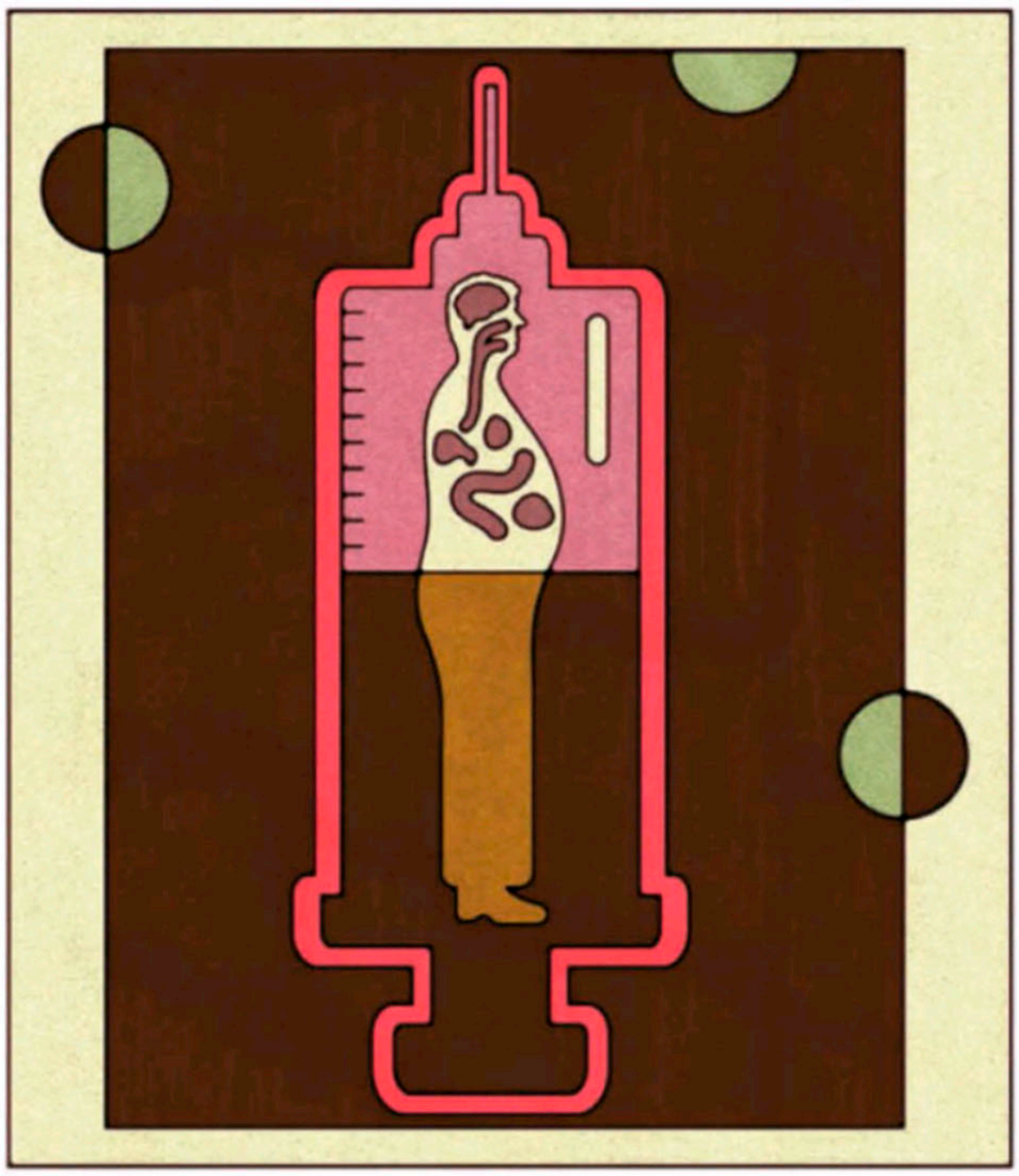
Prospect theory translated this model of decision-making from vignettes into the language of algebra and geometry. That made it palatable to economists. Indeed, the discipline began to claim this sort of thing as its own. Applications of psychology "came to be called behavioural economics", lamented Kahneman, "and many psychologists discovered that the name of their trade had changed even if its content had not."

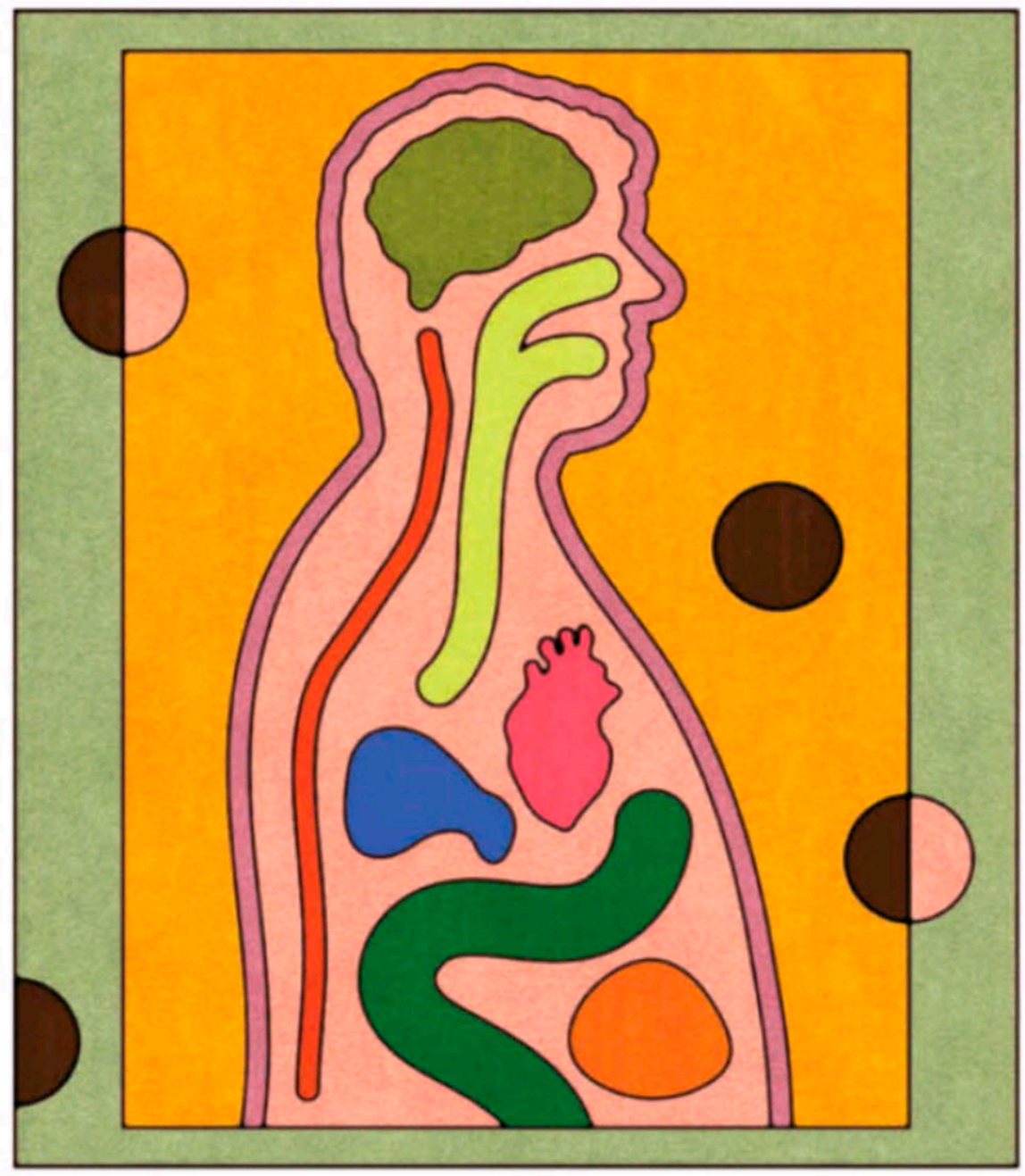
The cold-hand fallacy

Even as economics was rebranding psychology, Kahneman revived an older economic tradition: "hedonimeters", gauges of pleasure and pain that Francis Edgeworth, a 19th-century economist, had imagined. Kahneman's hedonimeter simply asked people to rate their feelings moment-to-moment on a scale. He found that people's ratings were often at odds with what they later recalled. Their "remembering" selves put undue weight on the end of an experience and its best or worst moment, neglecting its duration. People would rather keep their hand in painfully cold water for 90 seconds than for a minute, if the final 30 seconds were a little less cold than the preceding 60. Likewise, people sign up for hectic tourist itineraries because they look forward to looking back on them, not because they much enjoy them at the time.

The implications of this discovery extend into philosophy. Which self counts? Despite its manifest flaws, the curatorial self, artfully arranging unrepresentative memories into a life story, is dear to people. "I am my remembering self," Kahneman wrote, "and the experiencing self, who does my living, is like a stranger to me." Now his experiencing self has done its living. And it is up to the many people he touched to do the remembering for him. ■

Science & technology





Pharmacology

Eating the world

Blockbuster anti-obesity medicines could also help treat many other diseases

THE GILA monster is a poisonous North American lizard that measures around 50 centimetres and sports a distinctive coat of black and orange scales. This lethargic reptile, which mostly dwells underground and eats just three to four times a year, is the unlikely inspiration for one of pharma's biggest blockbusters: a new generation of weight-loss drugs that has patients—and investors—in a frenzy. Originally made for diabetes, evidence is growing that they also have benefits in diseases of the heart, kidney, liver and beyond.

Since the late 1980s scientists believed that a gut hormone called glucagon-like peptide-1 (GLP-1), which is secreted by the intestines after a meal, could help treat diabetes. GLP-1 increases the production of insulin (a hormone that lowers blood-sugar levels) and reduces the production of glucagon (which increases blood-sugar levels). But GLP-1 is broken down by enzymes in the body very quickly, so it sticks around for only a few minutes. If it were to be used as a drug, therefore, patients would have faced the unwelcome prospect of needing GLP-1 injections every hour.

In 1990 John Eng, a researcher at the Veterans Affairs Medical Centre in The Bronx, discovered that exendin-4, a hormone found in the venom of the Gila monster, was similar to human GLP-1. Crucially, the exendin-4 released after one of the monster's rare meals is more resistant to enzymatic breakdown than GLP-1, staying in its body for hours. It took more than a decade before exenatide, a synthetic version of the lizard hormone, created by Eli Lilly, an American pharma giant, and Amylin Pharmaceuticals, a biotech firm, was approved to treat diabetes in America. This breakthrough spurred other firms to develop more effective and longer-lasting GLP-1 medications as a treatment option for diabetes, beyond injections of insulin.

Scientists had also been aware that GLP-1 had another side-effect: it slowed the rate of "gastric emptying", which allows food to stay in the stomach for longer and suppresses appetite. But the potential weight-loss benefits were not seriously pursued at first. It was only in 2021 that Novo Nordisk, a Danish firm, showed data from a clinical trial where overweight or obese patients were put on a weekly dose of its GLP-1-based diabetic drug, semaglutide, which was then being marketed under the name Ozempic, for 68 weeks. The results were dramatic—participants had lost 15% of their body weight, on average.

Fat profits

The medicines that mimic the GLP-1 hormone then became blockbusters. With close to half of the world's population expected to be obese or overweight by 2030, according to the World Obesity Federation, demand for these drugs is surging—Bloomberg, a data provider, estimates that these medications will hit $80bn in yearly sales by then. The market is projected to grow by 26% per year in the next five years, compared with 16% per year for oncology drugs and 4% per year for immunology medicines, the two other biggest areas.

So far only three GLP-1 drugs have been approved to treat obese or overweight individuals: liraglutide and semaglutide, developed by Novo; and tirzepatide, made by ▸▸

→ ALSO IN THIS SECTION

65 Putting the bot in botany

66 A secret internet backdoor

Lilly. But the market has already attracted a wave of competitors (see chart 1). Bloomberg tracks close to 100 wannabe drugs in the development pipeline. Most new therapies hope to outdo semaglutide and tirzepatide by crafting drugs that are easier to take, cause fewer side-effects or result in more effective weight loss (see chart 2).

One issue is convenience. Both semaglutide and tirzepatide are injections that need to be taken weekly. Stop the dose and most of the weight returns within a year. Amgen, a large American biotech firm, is developing an anti-obesity drug that relies on doses once a month, and hopes the weight-loss effects will last even after treatment ends. AMG133 activates receptors for GLP-1 while blocking receptors of glucose-dependent insulinotropic polypeptide (GIP), a hormone secreted in the small intestine in response to food intake that stimulates the production of both insulin and glucagon. The company is now conducting clinical trials to find out if patients can, over time, be gradually weaned towards smaller doses.

Switching from injections to pills would also make the drugs a lot more tolerable for those who dislike needles. Novo is working on an oral version of semaglutide that works just as well as its jabs. But the pill requires 20 times the amount of the active ingredient as the injection, and must be taken daily. With semaglutide in short supply, Novo has had to push back the oral version's launch. Lilly also has a daily pill that targets GLP-1 receptors called orforglipron in late-stage clinical trials.

Another drawback of GLP-1-based medicines is the nausea and vomiting that frequently accompanies their use. Zealand Pharma, a Danish biotech firm, is developing a drug that is based on a different hormone called amylin, produced in the pancreas along with insulin in response to food intake. But unlike GLP-1, which suppresses appetite, amylin induces satiety, or the feeling of fullness after a meal.

Adam Steensberg, boss of Zealand, says that in most people a hormone, leptin, is released from fat tissue that signals to the brain that the body is full. Obese individuals are insensitive to that hormone. Clinical studies have shown that analogues of amylin can make people sensitive to leptin again, helping them to stop eating earlier. Feeling full, rather than lowering appetite, may also reduce the feeling of nausea. Mr Steensberg says that results from early-stage trials suggest that its drug could achieve similar weight loss as GLP-1 drugs, but with less nausea and vomiting.

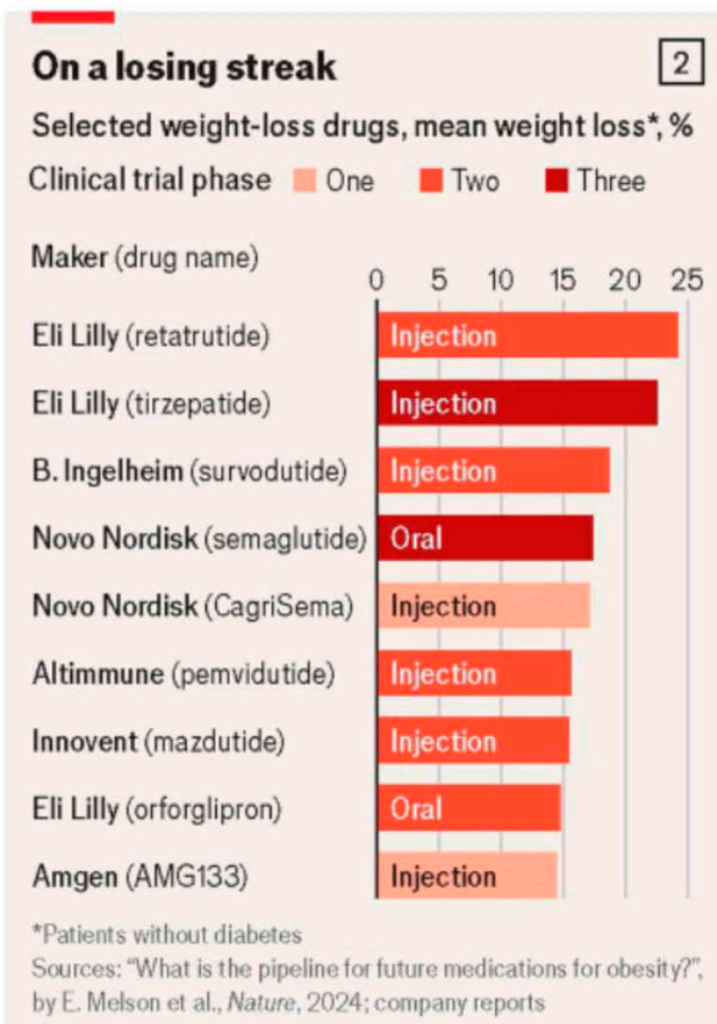
Besides pesky injections and nausea, a bigger concern is that patients on these drugs do not just shed fat, they also lose lean muscle mass. Some patients drop almost 40% of their body weight in lean mass, a serious concern for older patients.

To counter this, companies are trying out, alongside GLP-1 drugs, medicines originally designed to treat muscle atrophy.

Regeneron, an American pharma company, is testing drugs that block myostatin and activin, proteins that inhibit muscle growth in the body. Taken with semaglutide, the combination could boost the quality of weight loss by preserving lean muscle. Similarly, BioAge, a California-based biotech, is testing a drug that can be taken alongside Lilly's tirzepatide. The drug, called azelaprag, mimics apelin, a hormone secreted after exercise that acts on skeletal muscle, the heart and the central nervous system to regulate metabolism and promote muscle regeneration. In obese mice, the combination led to greater weight loss compared with tirzepatide alone, while preserving lean body tissue.

The slimming drugs aren't just for shedding pounds. Because obesity is linked to over 200 health issues, including strokes, kidney problems and fatty liver, GLP-1 drugs are proving useful in many other areas of medicine.

A recent clinical trial by Novo that ran for five years and enrolled more than 17,500 participants found that semaglutide cut the risk of serious heart issues like heart attacks, strokes, or death from heart disease by 20%. Novo believes that the heart benefits of the treatment are not due to weight loss alone, because the reduction in the risk of cardiovascular problems occurred early, before patients lost weight. In March semaglutide was approved by the US Food and Drug Administration for reducing the risk of heart disease in obese or overweight people, the first time a weight-loss medication has been approved for this purpose. Results from another clinical trial have shown that semaglutide reduced the risk of kidney-disease-related events by 24% in patients with type-2 diabetes.



Another weight-loss drug, survodutide, being developed by Boehringer Ingelheim, a German drug company, and Zealand, has shown promising results in being able to treat a serious liver condition called metabolic dysfunction-associated steatohepatitis (MASH). This is caused by the build-up of excess fat in the liver and can lead to liver cancer or liver failure.

In a recent trial of 295 patients, 83% of them saw a significant improvement in their condition when treated with survodutide, compared with 18% of those on a placebo. Survodutide targets receptors for GLP-1 and glucagon. Waheed Jamal from Boehringer Ingelheim says that there is evidence that glucagon breaks down more fat in the liver compared with GLP-1 and reduces fibrosis (build-up of excessive scar tissue in the liver).

Gut meets brain

Though a lot of focus has been on the action of these medicines on improving metabolic health, scientists are now uncovering that these drugs also engage with the brain and immune system, by interacting with GLP-1 receptors in the brain. Daniel Drucker, a diabetes researcher at Mount Sinai Hospital in Toronto, found that in mice suffering from extensive inflammation throughout the body, GLP-1 drugs reduced the condition, but only when the receptors in the brain were not blocked. When the brain receptors in mice were blocked or genetically deleted, the anti-inflammatory properties of the drugs were lost. This suggests that GLP-1 drugs tame inflammation by acting on the brain cells.

For some this suggests that these drugs might be useful for treating brain disorders that are characterised by inflammation, such as Alzheimer's disease and Parkinson's disease. Since 2021, Novo has been conducting a clinical trial involving more than 1,800 patients to test whether semaglutide helps patients with early stages of Alzheimer's. This study is expected to be completed by 2026.

Dr Drucker sees the anti-inflammatory qualities of GLP-1 medications as key to

their versatility. He notes that, besides Alzheimer's and Parkinson's, chronic inflammation is a factor in many complications for people with type-2 diabetes and obesity, and affects organs like the kidneys, heart, blood vessels, and liver. If these drugs eventually help in treating these conditions, Dr Drucker believes that their inflammation-reducing properties could explain part of their success.

The appetite-suppressing effects of these drugs has also raised interest in their ability to curb cravings more generally. Researchers in Denmark investigated the effect of GLP-1 drugs on 130 people with alcohol-use disorder. They found no overall difference in subsequent alcohol consumption between patients who used the drugs (alongside therapy) compared with those given a placebo. However, a subset of obese patients taking the drugs did end up drinking less alcohol. The researchers also looked at brain activity in the patients when they were shown pictures of alcoholic drinks—for those in the placebo groups the reward centres of their brains lit up; for patients on GLP-1 drugs, activity in the areas of the brain associated with reward and addiction was attenuated, indicating a direct brain effect. Researchers are now exploring if the drugs might have an impact on how people use other addictive substances such as tobacco or marijuana.

All these findings are still early. Developing new drugs is costly and time-consuming. There are steep failure rates. Successes in the lab may not work in people, and results in small groups may not replicate in larger ones. But with the potential to treat many conditions well beyond obesity and diabetes, hope around the new drugs will only grow. ■

Biomimicry

Putting the bot in botany

Why robots should take more inspiration from plants

THE ENORMOUS titular robots of the "Transformers" universe, a popular franchise spanning toys, TV series, video games and films, move along the ground in one of two ways. On wheels, when they are shaped like vehicles; on giant humanoid feet when they are not. For decades, most real-world robots also fell neatly into these two fictional paradigms.

Then, around 15 years ago, came the realisation that other means of locomotion were possible. "Zoomorphic" robots mined the animal kingdom for inspiration, piggybacking on evolution's millennia of research and development. One mimicked an octopus's malleable arm, allowing it to easily grasp objects and manoeuvre into tight, tricky spaces. Another replicated the ridge-covered toes of a gecko and, consequently, its ability to scale walls.

Hi, are we related?

Animal-like robots continue to be popular. In recent years both America's and Britain's armed forces have experimented with quadrupedal robot "dogs" for patrols and surveillance; in February a snake-shaped robot was sent into one of the damaged nuclear reactors of the Fukushima power plant in Japan to inspect the debris left inside. And yet, says Barbara Mazzolai, an Italian roboticist, the field of robotics has proved far less keen to investigate the other major category of living things—plants. She attributes the reluctance to a misconception about the usefulness of plant behaviour: that they are capable of neither motion nor perception. "It's not true at all," she says.

Dr Mazzolai and her team at the Bioinspired Soft Robotics Laboratory at the Italian Institute of Technology (IIT) in Genoa recently unveiled a machine meant to uproot this dogma. Writing in *Science Robotics*, they described "FiloBot" (pictured above), a robot based on climbing plants. Like the real thing, FiloBot (from the Italian word for "tendril") is capable of growing, attaching to and twining around supports, and navigating through an environment in response to external stimuli.

To survive, a climbing plant must have the capacity to switch between several different modes of behaviour. In forest environments, it must first grow out of the soil and travel along the ground in search of a support to latch onto—a nearby tree, say. To do this the plant must have a structure capable of bearing its own weight. Once a support is located, though, the plant must switch strategy—anchoring itself around the object and then growing upwards towards the light. To outcompete other plants, it must move as quickly as possible, prioritising rapid growth over heft.

To help it choose the best angle at which to grow, a climbing plant uses information from light and gravity receptors distributed along each shoot. It can also modify the bulkiness of its tendrils by changing how their constituent cells divide and elongate: more padding in the middle will create a firmer tendril, while extra growth on one side will lead to curvature.

Move into the light

FiloBot mimics these behaviours using sensors in its head—at the tip of the main shoot—which is also equipped with a spool of plastic and a heating element. By melting and extruding the plastic in a circular pattern, it can 3D-print its own body at a rate of between two and seven millimetres per minute (bamboo, the world's speediest plant, cannot beat 0.1). Depending on brightness and orientation, it alters the heat that the plastic is exposed to—lower temperatures result in a more brittle body that increases in size more quickly, while higher temperatures make denser and stronger clumps that grow more slowly. By varying the amount of plastic deposited around the circle, it can also grow in a rotating pattern to coil around a support.

The researchers found that these simple functionalities were enough to let FiloBot move through a complex, unseen environment, cross gaps and find things to attach to. The lack of heavy on-board computing hardware, they say, means that it remains nimble and requires minimal oversight, while its slow pace means that it doesn't disturb things around it. They reckon that this makes it suitable for potential applications including environmental monitoring in hard-to-reach or un- ▸▸

known locations (where piloting a robot along an exact course might be impossible), or monitoring disaster sites where existing infrastructure is unstable.

For now, as the researchers tweak and test it further, FiloBot's tendrils have not left the laboratory. Still, it has already been useful in deconstructing plant behaviour. For example, it was long hypothesised that climbing plants find their supports by harnessing an ability to grow towards shade, though the exact mechanism was unclear. FiloBot could replicate this behaviour by seeking out the far-red wavelengths characteristic of shaded areas, providing an insight into how plants might accomplish the same thing.

FiloBot is not the only plantlike robot the team is cultivating. Dr Mazzolai has been developing "plantoids", based on roots, since 2012 (then the first plant-inspired robotics venture in the world). These can burrow through earth, and could be used to analyse chemicals or find water. And in 2021 the group at IIT, along with European partners, started developing "I-Seed", a biodegradable mini-bot that can be moved about by wind and rain and change shape according to humidity. Based on the seeds of the South African geranium, it could be used to carry and distribute real seeds for reforestation, opening up and releasing its cargo once it hits suitable soil.

Dr Mazzolai hopes that such projects will inspire other roboticists to take their cues from botany. The plant kingdom is another world, she says, with a completely different approach to the animal one. "And so we can develop completely new technologies and artificial solutions, because it is so different." ■

Hacking the internet

Cyber-scary

A stealth attack came close to compromising the world's computers

IN 2020 XKCD, a popular online comic strip, published a cartoon depicting a teetering arrangement of blocks with the label: "all modern digital infrastructure". Perched precariously at the bottom, holding everything up, was a lone, slender brick: "A project some random person in Nebraska has been thanklessly maintaining since 2003." The illustration quickly became a cult classic among the technically minded, for it highlighted a harsh truth: the software at the heart of the internet is maintained not by giant corporations or sprawling bureaucracies but by a handful of earnest volunteers toiling in obscurity. A cyber-security scare in recent days shows how the result can be near-disaster.

On March 29th Andres Freund, an engineer at Microsoft, published a short detective story. In recent weeks he had noticed that SSH—a system to log on securely to another device over the internet—was running about 500 milliseconds more slowly than expected. Closer inspection revealed malicious code embedded deep inside XZ Utils, some software designed to compress data used inside the Linux operating system, which runs on virtually all publicly accessible internet servers. Those servers ultimately undergird the internet, including vital financial and government services. The malicious code would have served as a "master key", allowing attackers to steal encrypted data or plant other malware.

The most interesting part of the story is how it got there. XZ Utils is open-source software, meaning that its code is public and can be inspected or modified by anyone. In 2022 Lasse Collin, the developer who maintained it, found that his "unpaid hobby project" was becoming more onerous amid long-term mental-health issues. A developer called Jia Tan, who had created an account the previous year, offered to help. For more than two years he, she or they contributed helpful code on hundreds of occasions, building up trust. In February they smuggled in the malware.

The significance of the attack is "huge", says The Grugq, a pseudonymous independent security researcher who is widely read by cyber-security experts. "The backdoor is very peculiar in how it is implemented, but it is really clever stuff and very stealthy"—perhaps too stealthy, he suggests, because some of the steps taken in the code to hide its true purpose may have slowed it down and thus raised Mr Freund's alarm. Jia Tan's patience, supported by several other accounts who urged Mr Collin to pass the baton, hints at a sophisticated human-intelligence operation by a state agency, suggests The Grugq.

He suspects the SVR, Russia's foreign-intelligence service, which in 2019-20 also compromised SolarWinds Orion network-management software to gain extensive access to American government networks. Analysis by Rhea Karty and Simon Henniger, published on their Substack, suggests that Jia Tan made an effort to falsify their time zone but that they were probably two to three hours ahead of Greenwich Mean Time—suggesting they may have been in eastern Europe or western Russia—and avoided working on eastern European holidays. For now, however, the evidence is too weak to nail down a culprit.

The attack is perhaps the most ambitious "supply-chain" attack—one that exploits not a particular computer or device, but a piece of back-end software or hardware—in recent memory. It is also a stark illustration of the frailties of the internet and the crowdsourced code upon which it relies. For defenders of open-source software, Mr Freund's eagle eyes are a vindication of its premise: code is open, can be inspected by anyone, and errors or deliberate backdoors will eventually be found through collective scrutiny.

In the shadows

Sceptics are less sure. Some code security and debugging tools did pick up the anomalies in XZ Utils, but Mr Freund acknowledges "the number of coincidences that had to come together to find this", including a series of technical but arbitrary choices he made while troubleshooting an unrelated problem. "Nobody else had raised concerns," writes Kevin Beaumont, another cyber-security specialist. Software engineers are still probing the inner workings of the backdoor, attempting to understand its purpose and design. "The world owes Andres unlimited free beer," concludes Mr Beaumont. "He just saved everybody's arse in his spare time."

The attack was detected and stopped before it could cause widespread damage. There is no way to tell whether Jia Tan, or the team apparently behind that persona, has been working on squirrelling into other vital pieces of internet software under other aliases. But security researchers are concerned that the foundations of the internet are ripe for similar campaigns. "The bottom line is that we have untold trillions of dollars riding on top of code developed by hobbyists," notes Michal Zalewski, an expert. Other backdoors may yet lurk, undiscovered, elsewhere in the internet's critical software. ■

Culture

Nuclear war

Under the mushroom cloud

Two books examine modern nuclear weaponry and the global annihilation it could bring about

Nuclear War: A Scenario. By Annie Jacobsen. *Dutton; 400 pages; $23.95. Torva; £20*
Countdown. By Sarah Scoles. *Bold Type Books; 272 pages; $30 and £25*

IN 1960 AMERICA had around 18,000 nuclear weapons. It also had detailed plans for how to use them. Had it implemented them, 275m people in the Soviet Union would have been killed in the first hour of war. Another 325m would have died from radioactive fallout over the next six months. Even if China stayed out of this prospective war, the fallout would have killed perhaps 300m of its citizens.

"I thought of the Wannsee conference," wrote John Rubel, an American defence official present at one nuclear-planning meeting, referring to a gathering of Nazis in a suburb of Berlin in January 1942, at which they prepared the systematic extermination of European Jews. "I felt as if I were witnessing a comparable descent into the deep heart of darkness."

In "Nuclear War: A Scenario" Annie Jacobsen, a journalist and the author of several books on military affairs, tells Mr Rubel's story as a preface to her own nonfiction account of a hypothetical North Korean nuclear attack on America and the ensuing spiral which consumes the world. Her book is at once methodical and vivid, technically grounded and at times lurid.

The American satellites which pick up the North Korean launch have sensors "so powerful they can see a single lighted match from 200 miles away", she writes. Within 15 seconds radars can work out that the missile is heading for America. It will take just over half an hour to arrive. Once the president has been briefed, he has six minutes to make a choice.

Ms Jacobsen coolly lays out the speed with which entire countries can be snuffed out. A Russian submarine off America's west coast could launch its full complement of missiles at all 50 states at once in 80 seconds. Even if an American submarine was close behind it could not fire a torpedo in that time, notes one expert. That fact is said to have shocked America's navy chief when it was revealed to him in 1981. Missiles launched from close to the American coastline would take a little over seven minutes to hit their target.

"Nuclear War" sits in the long tradition of didactic nuclear dystopia. The genre flourished in the 1980s with a series of films—"The Day After", "Threads" and "The War Game" (which had been made 20 years earlier, but was deemed too shocking to release then). All of these reflected contemporary fears that the cold-war arms race was spinning out of control.

The genre receded in the 1990s and 2000s: nuclear weapons were tools of the past. Yet Russia's invasion of Ukraine—a country which inherited nuclear missiles from the Soviet Union in 1991, but later gave them up—has put them squarely back at the forefront of geopolitics and culture. Consider the success of Christopher Nolan's biopic of J. Robert Oppenheimer, the father of the atomic bomb, and the commercial revival of "American Prometheus", ▸▸

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the book on which that film was based.

There is a cinematic quality to Ms Jacobsen's scenario, too. In her account, the president is rushed onto a helicopter to escape to a mountain hideout. He is harangued by generals to retaliate quickly. "If somebody launches a nuclear weapon against us," says General John Hyten, a former commander of American nuclear forces, "we launch one back." William Perry, Bill Clinton's secretary of defence, tells Ms Jacobsen that once an incoming missile is detected "we prepare to launch...we do not wait." The aim is to "decapitate" North Korea—destroy its leadership and command—before it can fire more missiles.

Ms Jacobsen conveys the reality of nuclear war in sometimes stomach-churning detail. In her imagined scenario, a North Korean missile obliterates a nuclear-power station north of Los Angeles, seeding spent fuel into the fallout. Victims of the X-ray flash are left "a shredded horror of bloody tendons and exposed bone". Another bomb destroys Washington, DC. Firestorms bring hurricane-like winds of 660°C; people are baked alive in the bowels of the Capitol and White House. In documenting the minutiae of the apocalypse, the writing is redolent of "Hiroshima", a seminal article by John Hersey published in the *New Yorker* in 1946.

The story is about not just nuclear use, but nuclear war. Ms Jacobsen's narrative is built on an elaborate sequence of tragic misunderstandings. American missiles bound for North Korea must overfly Russia by dint of geography. American leaders cannot get Russia's president on the phone. Russia's sub-par early-warning satellites, which have indeed been known to confuse clouds for plumes, mistakenly see hundreds of missiles incoming. The Kremlin attacks America. America responds. There are 100 "aimpoints"—jargon for targets—in the greater Moscow area alone.

It is possible to quibble with details in Ms Jacobsen's scenario. It is hard to see why North Korea would risk a suicidal bolt from the blue. America might have a "launch on warning" policy, but as Dick Cheney, a former defence secretary and vice-president, has observed, "realistically, most presidents wouldn't do it." And would Russian leaders truly end the world because of data from faulty sensors?

What is not in dispute, however, and what has receded from public understanding over the past 30 years, is the world-changing impact of nuclear weapons. The vast injection of soot into the atmosphere would result in a 70% reduction in the sun's rays for a decade. Rainfall would decline by 50%. "After 10,000 years of planting and harvesting," writes Ms Jacobsen, "humans return to a hunter-gatherer state."

And yet humans continue to deploy, maintain and build nuclear weapons. In "Countdown" Sarah Scoles, a science journalist, profiles the people who work in America's vast complex of nuclear laboratories, including Los Alamos in New Mexico (where Oppenheimer oversaw the invention and construction of the first nuclear bomb), the nearby Sandia labs, and Lawrence Livermore National Laboratory in California. The most compelling parts of her book are those in which she explores how these scientists, like Oppenheimer, reconcile their work with their principles.

Some are gung-ho about the importance of nuclear deterrence, brandishing charts which show how deaths from major wars plummeted after the invention of the bomb. Others are equivocal, expressing opposition to nuclear weapons while insisting that someone has to ensure that the ones which exist remain safe and reliable. Still others seem deeply conflicted, preferring to emphasise the civilian applications of their research. "I wonder if the activists on the outside understand that there are those of us on the inside that share many of their goals," says one scientist at Los Alamos, professing support for (eventual) disarmament. "That's not an extreme position here at all."

A generational divide also shines through "Countdown". Before 1992 America kept its nuclear weapons in good order by explosive testing. "People would just get on the airplane in the morning, go down [to Nevada] and blow shit up in the desert," says Rob Neely, head of simulations and computing at Livermore, with a hint of contempt. "It wasn't until they shook the Earth that they really felt confident." As America designs a new warhead, the W93, for the first time in decades, some scientists of that era are sceptical that it can be done without testing. Mr Neely's generation relies on computer modelling, aided by the world's largest supercomputers and other technical wizardry. "We've got a new generation of designers coming up," says Mr Neely. In a digital world, "the codes are their test site."

Ms Scoles has written a balanced and readable book, one which conveys the attitudes of nuclear disarmers and deterrence advocates alike. What is striking is that even among those who believe that nuclear modernisation is essential in a world where China's arsenal is growing and Russia's is becoming more diverse, there is profound ambivalence about the consequences of this and the precariousness of deterrence. Nuclear weapons "will either have a pacifying effect or a catastrophic effect", acknowledges Brad Roberts, the author of "The Case for US Nuclear Weapons in the 21st Century" and once the Pentagon's top nuclear official. "Monday, Wednesday, Friday, I feel one way. Tuesday, Thursday, Saturday, another," he tells Ms Scoles. "Then Sunday I drink." ■

Film franchises

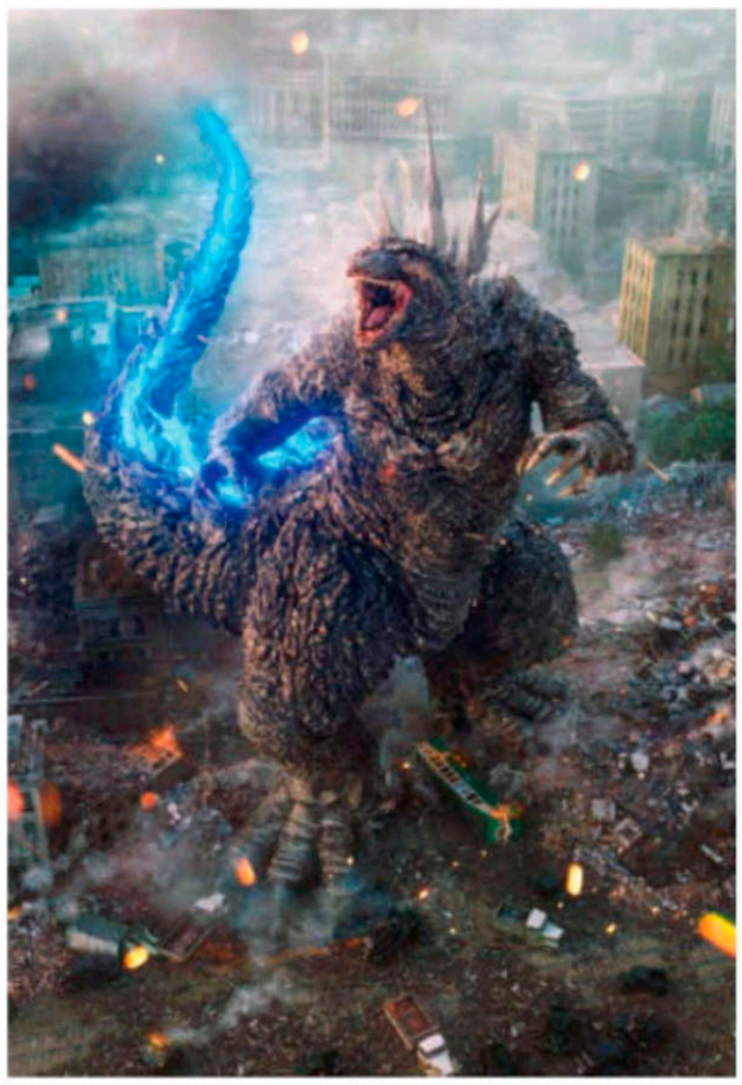
Atomic beast

As a symbol of nuclear weapons, Godzilla has roared back to relevance

AT THE AGE of 70 some might think about retiring, if they have not done so already. Not Godzilla. Since the giant lizard made his screen debut in "Godzilla", a Japanese film released in 1954, he has crashed his way through nearly 40 movies. (Guinness World Records certifies Godzilla as the longest-running movie franchise.) Nor does he shows any sign of slowing down. In December "Godzilla Minus One", a Japanese film, became a box-office hit. "Godzilla x Kong: The New Empire" has recently hit cinemas, too.

From his conception, Godzilla has symbolised the fears of his time. He was created from the wreckage of the second world war. Honda Ishiro, the writer-director of "Godzilla", was haunted by the bombing of Hiroshima, the aftermath of which he witnessed first-hand. "It was said that, for the next 72 years, not a single blade of grass would grow there—and that really stayed with me," he said. "Godzilla represents the frightfulness of nuclear weapons."

In "Godzilla", after the monster destroys a village on Odo Island, researchers conclude that he was roused from his prehistoric slumber by hydrogen-bomb testing. The bomb's cloud still hung in the air: earlier in 1954 America had detonated powerful thermonuclear bombs on Bikini Atoll in the Pacific. The crew of a Japanese ▸▸



The scales and the destruction

fishing boat was accidentally irradiated.

"Godzilla" provides plenty of horror-film thrills, including scenes that have been endlessly imitated: people fleeing through narrow city streets and the monster crunching on train carriages. But it also reflects on Japan's war trauma. "I barely escaped the atomic bomb at Nagasaki," one woman says, "and now this!" Japan is isolated from major world powers and must face the monster alone. In the story's most interesting turn, a scientist has to decide whether to use a terrible new weapon to defeat this enemy.

As the memory of nuclear destruction started to recede, Godzilla's meaning mutated. America has been producing its own Godzilla films since 1956, and Hollywood has often ignored the historical aspect of the beast's story in favour of pure action. In time Godzilla went from myth to meme. He became one of several characters in a franchise known as the "MonsterVerse". Recent instalments have brought supersize lizard and enormous ape together: "Godzilla x Kong" is a sequel to "Godzilla vs. Kong" (2021).

The MonsterVerse has tended towards the absurd, but has also explored a theme implicit in the Godzilla story: the environment. In one movie Godzilla helps defeat eco-terrorists who want to unleash primitive monsters to rid Earth of the "infection" of mankind. In "Godzilla x Kong" the monster defends an untouched natural realm. In these films, released in an age of anxiety about the climate, Godzilla represents an ancient natural order that humans are wont to ruin.

"Godzilla Minus One" is the best recent addition to the creature's canon: it even earned Godzilla his first Oscar in March, for Best Visual Effects. Yet the film is not just aesthetically impressive; it is as profound as the original, and in conversation with it. Set at the end of the second world war the film follows Shikishima Koichi, a timid kamikaze pilot. When he first encounters Godzilla, at a landing strip on Odo Island, he fails to act. He returns to Tokyo to find his parents have been killed in the bombing of the city.

By the time Godzilla strikes again—the monster has gained strength from nuclear tests in the Pacific—Koichi has a makeshift family he must protect. He makes up for his wartime dishonour by defeating the reptile and, with it, the cult of death that was gripping Japan at the time.

Today, as tensions rise between nuclear powers, Godzilla has regained some of his ominous symbolism. The Doomsday Clock, an estimate of the risk of global catastrophe by the Bulletin of Atomic Scientists, is set at 90 seconds from midnight—as close as it has ever been to Armageddon. As long as the clock keeps ticking, this monster will matter. ■

Selling scripture

How to make money from the Bible

Donald Trump has entered a competitive and unusual market

AMERICA'S 45TH president has excellent taste in Bible translations. When deciding which one to endorse this Easter, Donald Trump chose the King James version, widely considered to be one of the greatest works of English literature of the 17th century. Or rather, he chose a modern repackaging of it dubbed the "God Bless the USA Bible". This includes in one volume the American constitution, the lyrics of a country song called "God Bless the USA" and the scriptures.

"All Americans need the Bible in their home, and I have many. It's my favourite book," intoned Mr Trump in a promotional video. "Religion is so important," he added. "We must make America pray again."

And, tacitly, pay again: the new book costs $59.99 (plus postage). Mr Trump is not selling it directly, but receives royalties with each purchase, according to the *New York Times*. Thus, he has entered the highly competitive business of trying to make a buck from the holy book.

This is a new kind of venture for Mr Trump, whose previous offerings have tended to be flashier: gold-finished Trump sneakers for $399, an enticing Trump cologne for $99. The Bible, far from being a luxury object, inveighs against wealth. It tells of the life of a man who said things like "Blessed are the poor" and "Love your enemies." Such sentiments are not easily mistaken for those of Mr Trump, which include "Part of the beauty of me is that I am very rich" and "The worst thing a man can do is go bald."

The market in religious publishing is thriving in America: the recent StatShot Annual Report from the Association of American Publishers found that revenues of religious presses had risen 7% in the first ten months of 2023, to $674m. A portion of that might defray at least some of Mr Trump's sizeable legal expenses, but this is a very unusual market, with obstacles for new entrants.

The biggest is that many suppliers insist on giving its most popular product away for nothing. The Gideons, a charity founded in 1899, have placed 2.5bn Bibles and New Testaments in hotels, hospitals and domestic-violence shelters around the world—roughly one for every Christian man, woman and child. Weary travellers yearning for gospel truths can simply reach into a bedside drawer and find some. Other groups have posted the entire Bible online, so the faithful can search for their favourite verses. Against such unfair competition, can Mr Trump compete?

Probably, for several reasons. First, the revered text he is touting is not subject to copyright—a concept that did not exist when the King James Bible was first published in 1611. So he is demanding a high ▸▸

price for a text whose long-dead authors do not need paying. Never mind scribbling notes in the margins of the books of the minor prophets; the profit margins on each copy of this book should be major.

None of that will matter if no one buys the God Bless the USA Bible. But it has two celebrity endorsements: Lee Greenwood, the country star who sings "God Bless the USA", is involved, too. And Mr Trump is pushing the tome during a bitter election campaign, to a vast number of followers, many of whom are passionate both about scripture and about supporting the former president against his fiendish enemies.

Others in the devotional publishing industry have faced the same challenge as Mr Trump—how to refresh a blockbuster written thousands of years ago—and come up with even more creative solutions. They cannot commission sequels by living authors, as the literary estates of Agatha Christie and Ian Fleming have done to produce new Hercule Poirot and James Bond stories. But they can commission new translations (a huge task) or tailor versions for specific audiences.

Thus from Zondervan, the Christian arm of HarperCollins, you can buy the "Boys Bible" ("gross and gory stuff you never knew was in the Bible"). From a smaller German outfit, there is the "Biker Bible" ("the whole New Testament and life stories of bikers"). The Bible is long and confusing: many modern readers yearn for shortcuts to passages that might be especially relevant, and commentaries to aid comprehension. Others seek whimsy: you can buy the "Mother's Bible" (it's pink), or Bibles in regional dialects (a Glaswegian one opens with "In the Beginnin'"). There are even scriptures in fictitious tongues such as Klingon, from "Star Trek", or Quenya, invented by J.R.R. Tolkien.

Such experimentation is much easier with the Bible than it is with the Koran, and much easier today than in previous centuries. In the 16th century the scholar William Tyndale translated the Bible from Hebrew and Greek into English, in a way that displeased the church. He was later burned at the stake for heresy. The church was less tolerant of novelty in those days, and created literal ghostwriters.

Since many people take the Bible literally, careful proofreading is essential. In 1631 printers in London accidentally left the word "not" out of the seventh commandment, thus rendering it as "Thou shalt commit adultery." This delighted many readers, but not the authorities. The printers were hit with ruinous fines and lost their licence. The "Wicked Bible" subsequently became a collector's item; surviving copies are now valued at tens of thousands of dollars. Whether future generations will treasure Mr Trump's Bible so dearly remains to be seen. ■

Football and data

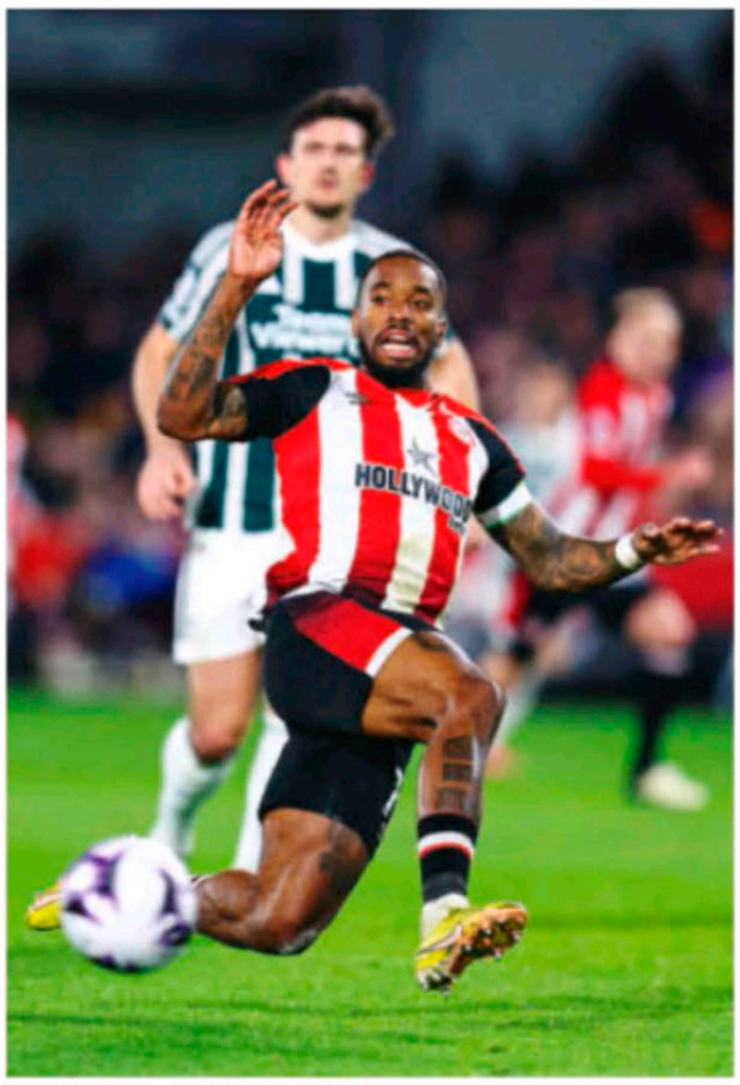
A numbers game

Smart Money: The Fall & Rise of Brentford FC. By Alex Duff. *Constable; 327 pages; £22*

AT MOST FOOTBALL clubs, the equation is simple: you put in (vast amounts of) money, and you get out star players and trophies. Take Manchester City, the Premier League's reigning champions. Before its takeover in 2008 by Sheikh Mansour of Abu Dhabi, the club often languished in the bottom half of the table; it has won English football's top trophy seven times since 2011. Chelsea also won back-to-back titles after the club was bought by Roman Abramovich, a Russian oligarch, in 2003. (Never mind that City is accused of financial mismanagement, which it denies, and Mr Abramovich was forced to sell Chelsea after Russia invaded Ukraine.)

Brentford FC has taken a different approach. The club, based in west London, was promoted into the Premier League in 2021 after toiling for decades in the lower reaches of football. What makes its success surprising is not how much money its owner, Matthew Benham, has put into the team, but how little. In a new book Alex Duff, a lifelong Brentford fan, explains how a frugal plan paid dividends.

Mr Benham first saw "the Bees" play in 1979, when he was 11. As a young adult he studied physics at Oxford University and then went to work in the City, where he became a derivatives trader. In his early 30s, sensing correctly that bookmakers were inaccurate when setting odds for football matches, Mr Benham left banking to become a full-time gambler.



Ivan Toney, a busy bee

He set up his own company, Smartodds, where he applied his aptitude for finding the underlying value of stocks to identifying the underlying strength of football teams. He competed with financial institutions to hire the best mathematicians. They were told to focus not on how many goals a team was scoring—which, according to Mr Benham, was subject to too much randomness—but on the "goal-scoring opportunities" it was creating. In time, he reckoned, the goals would come.

The approach was so efficient that when Brentford, going through one of its periodic financial crises, put out a general appeal for help in 2005, Mr Benham offered his services. Within a decade he owned the club and was applying his ideas to how the team was constructed. Analytics underpinned a remarkably lucrative buy-low-sell-high transfer strategy.

Like "Moneyball" (2003), Michael Lewis's hit book about the use of statistics in baseball, "Smart Money" is both informative and entertaining. Mr Duff introduces a disparate cast of characters, including Tony Bloom, another bettor, who took over Brighton in 2009. The book makes diverting excursions into the academic field of sports statistics and the birth of sports betting in America, among other subjects.

Mr Duff is also alert to football's long-standing, problematic relationship with gambling. Critics have voiced concerns about the effect of near-ubiquitous advertising on supporters. Players have become addicted to betting, too. Brentford's star striker, Ivan Toney (pictured), has just finished an eight-month ban after breaching betting rules more than 200 times.

There were plenty of sceptics within football about Brentford's philosophy. (As one old-timer carped: "Next week, why don't we get your computer to play against their computer and see who wins?") But in time it worked. In their debut season in the Premier League, Mr Benham's investment of around £100m ($126m) in the club—a tiny sum compared with competitors—realised its first profit of £25m.

Statistics have helped the team win on the pitch, too. Mr Benham identified set pieces as an important part of creating scoring opportunities, and hired Gianni Vio, an Italian coach with 4,000 such plays in his repertoire. Players are instructed to press the opposition and tackle players within ten seconds of them receiving the ball. Though Brentford is not vying for the title, in recent years the team has beaten several of football's plutocrats—including Manchester City. What were the odds? ■

Rwanda

Singing from the same hymn sheet

NYAMATA

How Paul Kagame uses culture to keep Rwandans on message

WHEN KIZITO MIHIGO was 12 years old he fled from his home. His father, a Tutsi, had been butchered by their Hutu neighbours. It was one of hundreds of thousands of murders in the Rwandan genocide, which began 30 years ago this month, in April 1994. At one point on his journey to safety in neighbouring Burundi, Mihigo survived only by playing dead underneath a pile of corpses.

Yet survive he did. The armed wing of the Rwandan Patriotic Front (RPF) defeated the genocidal regime; its leader, Paul Kagame, has run Rwanda ever since. When Mihigo returned he showed precocity for gospel music. "Twanze Gutoberwa Amateka" ("We Refuse to Let our History be Miscontrued"), in which he described the genocide as the cross Rwanda must carry, was played at commemorative services attended by Mr Kagame.

But Mihigo's doubts soon grew. He worried that the RPF's efforts to reconcile the country were superficial. His song of 2014, "Igisobanuro Cy'urupfu" ("The Meaning of Death"), mentioned those "slaughtered in revenge", a reference to Hutus killed by the RPF in the 1990s—acts that the RPF glosses over. Mihigo was held incommunicado, beaten and made to confess to "terrorism charges" which landed him in prison. After his release in 2018 he remained under surveillance. When he tried to flee in 2020 he was arrested. A few days later he was found dead in a cell.

Mihigo's story is symbolic of how culture has been used and abused in the three decades since the genocide. In some cases the arts have brought Rwandans together. In others they have been interpreted by the regime as a threat, ostensibly to the country's unity, but also to its own survival.

After 1994 the RPF promoted a narrative that there are no Hutus or Tutsis any more, just Rwandans, and everyone has *agarico* (dignity). These ideas are on display at genocide-memorial sites. In Nyamata, south of the capital, Kigali, authorities have preserved a church where 5,000 Tutsis were killed. On a recent visit the sun shone through bullet holes in the walls, illuminating the victims' clothes still lying on the pews. "The healing is a process," says Josephine, a guide. "After the genocide the new government abolished these ethnicities. We are all Rwandans now."

That mantra has been subtly encouraged through popular culture. During the slaughter a popular radio station called for the extermination of Tutsi "cockroaches". But now some three-quarters of Rwandans tune into "Musekeweya" ("New Dawn"), a radio show which has been on the air since 2004. It follows people from different, unspecified groups living in neighbouring villages, with Romeo-and-Juliet-style plotlines of love across divides.

Alongside unity-promoting culture is support of indigenous arts. In March the president watched the popular Inyamibwa Cultural Troupe (pictured) in a show marking 30 years since 1994. Such patronage highlights culture that predated colonialism (which entrenched Hutu and Tutsi identities) and supports Mr Kagame's oft-stated desire for Africa to avoid the wholesale import of Western values.

Yet in the real "land of a thousand hills" not everything is so heartwarming. Journalists, YouTubers and opposition politicians who break broadly defined laws on "divisionism", "terrorism" or genocide "denialism" can face unfair prosecutions, forced disappearance and unexplained deaths, according to Human Rights Watch, an NGO. Last year HRW documented how Rwandan spies intimidate Rwandans abroad. Critics may live far away, "but they are close to the fire. The day they get closer, the fire will burn them," said Mr Kagame, ominously, in 2019.

For all Mr Kagame's celebration of traditional arts, last year several members of the RPF were sacked from government jobs after attending a clan-coronation ceremony, suggesting concern about rival political groupings. In July, having already barred the most credible opposition figure, Mr Kagame will win re-election as president with a thumping majority.

At a "reconciliation village" in Mbyo Lauren Niyonagira tells her story of escape from genocidal militias. She sits in her house next to Aloys Mutiribambe, a fellow villager, who killed her sister. Remarkably, his son and her daughter have married.

Working out what to make of such scenes is a microcosm of thinking about Rwanda more broadly. The stories are harrowing; their codas inspiring. Both (state-backed) polls and independent research suggest that, although Rwandans may be irked by a bossy state, most people now rub along.

Yet in private pollsters fret that Rwandans do not feel safe to answer honestly. Other academic work describes a disgruntled peasantry unable to openly express dissent. In 2009 a study suggested that "New Dawn", the radio show, encouraged listeners to speak up about local problems, but had no effect on their willingness to affiliate with different groups.

Perhaps, then, it is not too cynical to wonder if there is something deceptive about reconciliation villages. Residents show off the cows they received for living there. Parked outside are 4x4s full of tourists paying hundreds of dollars to visit. After giving their accounts the villagers walk off in separate directions, without so much as a goodbye. ■

Dancing in step with the times

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Economic & financial indicators

	Gross domestic product, % change on year ago: latest		quarter*	2024†	Consumer prices, % change on year ago: latest		2024†	Unemployment rate, %		Current-account balance, % of GDP, 2024†	Budget balance, % of GDP, 2024†	Interest rates, 10-yr gov't bonds, latest, %		change on year ago, bp	Currency units, per $ Apr 3rd	% change on year ago
United States	3.1	Q4	3.4	1.8	3.2	Feb	2.5	3.9	Feb	-2.8	-6.1	4.4		93.0	-	
China	5.2	Q4	4.1	4.7	0.7	Feb	1.0	5.3	Feb‡§	1.4	-4.4	2.2	§§	-50.0	7.24	-4.8
Japan	1.2	Q4	0.4	1.3	2.8	Feb	2.3	2.6	Feb	2.7	-4.7	0.8		35.0	152	-12.8
Britain	-0.2	Q4	-1.2	0.4	3.4	Feb	2.6	3.9	Dec††	-2.8	-4.2	4.0		48.0	0.79	2.5
Canada	0.9	Q4	1.0	1.7	2.8	Feb	2.5	5.8	Feb	-0.6	-0.3	3.6		75.0	1.35	nil
Euro area	0.1	Q4	-0.2	0.8	2.4	Mar	2.4	6.5	Feb	2.7	-3.1	2.4		12.0	0.92	nil
Austria	-1.7	Q4	0.2‡	0.5	4.3	Mar	3.5	4.7	Feb	2.4	-2.4	2.9		nil	0.92	nil
Belgium	1.5	Q4	1.4	1.1	3.8	Mar	2.2	5.5	Feb	-0.5	-4.4	2.9		-3.0	0.92	nil
France	0.7	Q4	0.2	0.9	2.5	Mar	2.7	7.4	Feb	-0.7	-4.9	2.8		-1.0	0.92	nil
Germany	-0.2	Q4	-1.1	0.3	2.3	Mar	2.1	3.2	Feb	6.2	-1.5	2.4		12.0	0.92	nil
Greece	1.1	Q4	0.6	2.8	3.1	Feb	3.4	11.0	Feb	-5.7	-1.9	3.4		-84.0	0.92	nil
Italy	0.6	Q4	0.7	0.5	1.3	Mar	1.9	7.5	Feb	1.0	-5.3	3.8		-29.0	0.92	nil
Netherlands	-0.4	Q4	1.4	0.9	3.1	Mar	2.4	3.7	Feb	8.3	-2.4	2.6		4.0	0.92	nil
Spain	2.0	Q4	2.3	1.7	3.2	Mar	2.9	11.5	Feb	1.8	-3.5	3.2		-15.0	0.92	nil
Czech Republic	0.2	Q4	1.8	1.2	2.0	Feb	2.1	2.7	Feb‡	-0.5	-2.5	4.1		-55.0	23.4	-8.2
Denmark	3.5	Q4	10.8	1.3	0.8	Feb	1.8	2.9	Feb	9.4	1.2	2.4		-11.0	6.89	-0.7
Norway	0.5	Q4	6.2	1.0	4.5	Feb	2.6	3.9	Jan‡‡	14.4	12.0	3.7		69.0	10.7	-4.0
Poland	1.0	Q4	nil	2.8	1.9	Mar	4.1	5.4	Feb§	nil	-5.2	5.5		-56.0	3.97	8.1
Russia	5.5	Q3	na	1.9	7.7	Feb	6.5	2.8	Feb§	2.0	-1.7	13.3		248	92.4	-15.1
Sweden	-0.1	Q4	-0.2	0.4	4.5	Feb	2.7	8.5	Feb§	5.9	-0.7	2.5		24.0	10.7	-2.5
Switzerland	0.6	Q4	1.2	0.9	1.2	Feb	1.4	2.2	Feb	7.9	-0.3	0.7		-51.0	0.91	nil
Turkey	4.0	Q4	3.9	3.1	68.5	Mar	52.3	9.8	Jan§	-3.1	-4.5	24.8		1,460	31.9	-39.9
Australia	1.5	Q4	1.0	2.0	4.1	Q4	2.7	3.7	Feb	0.5	nil	4.0		82.0	1.53	-3.9
Hong Kong	4.3	Q4	1.8	3.2	2.1	Feb	2.2	2.9	Feb‡‡	7.0	-1.4	3.9		70.0	7.83	0.3
India	8.4	Q4	8.0	6.6	5.1	Feb	4.8	7.6	Mar	-0.8	-5.3	7.1		-22.0	83.4	-1.3
Indonesia	5.0	Q4	na	5.1	3.0	Mar	2.7	5.3	Q3§	0.3	-2.3	6.7		-7.0	15,920	-6.0
Malaysia	3.0	Q4	na	4.4	1.8	Feb	2.6	3.3	Jan§	1.9	-4.4	3.9		-11.0	4.76	-7.1
Pakistan	nil	2023**	na	0.9	20.7	Mar	21.0	6.3	2021	-3.0	-7.1	14.2	†††	-84.0	278	2.5
Philippines	5.6	Q4	8.7	5.7	3.4	Feb	2.7	4.5	Q1§	-2.2	-6.1	6.3		12.0	56.5	-3.0
Singapore	2.2	Q4	4.8	2.4	3.4	Feb	3.1	2.0	Q4	18.5	0.1	3.2		30.0	1.35	-1.5
South Korea	2.2	Q4	2.5	2.3	3.1	Mar	2.5	3.2	Feb§	1.9	-1.3	3.5		6.0	1,349	-2.4
Taiwan	4.9	Q4	9.7	3.3	3.1	Feb	2.0	3.4	Feb	14.1	0.1	1.5		25.0	32.1	-5.1
Thailand	1.7	Q4	-2.3	3.2	-0.8	Feb	1.2	1.0	Feb§	3.0	-3.5	2.8		23.0	36.7	-6.3
Argentina	-1.4	Q4	-7.3	-3.5	276	Feb	258.3	5.7	Q4§	0.2	-1.1	na		na	858	-75.5
Brazil	2.1	Q4	-0.1	1.8	4.5	Feb	4.1	7.8	Feb§‡‡	-1.5	-7.2	11.2		-164	5.08	-0.4
Chile	0.4	Q4	0.4	2.0	3.6	Feb	3.6	8.5	Feb§‡‡	-3.9	-2.5	5.9		61.0	962	-17.2
Colombia	0.3	Q4	0.1	1.3	7.7	Feb	5.8	11.7	Feb§	-3.2	-5.1	10.2		-131	3,814	20.7
Mexico	2.5	Q4	0.3	2.3	4.4	Feb	4.5	2.6	Feb	-0.6	-4.7	9.5		58.0	16.6	8.9
Peru	-0.4	Q4	0.9	2.4	3.0	Mar	2.6	7.6	Feb§	-0.4	-2.9	7.4		-10.0	3.70	1.9
Egypt	2.7	Q3	na	2.6	35.7	Feb	30.5	6.9	Q4§	-2.1	-10.9	na		na	47.4	-34.7
Israel	-4.6	Q4	-20.7	1.9	2.5	Feb	2.8	3.3	Feb	4.9	-6.3	4.4		67.0	3.71	-3.0
Saudi Arabia	-0.8	2023	na	2.0	1.8	Feb	2.1	4.4	Q4	0.7	-1.9	na		na	3.75	nil
South Africa	1.2	Q4	0.2	1.6	5.5	Feb	4.7	32.1	Q4§	-2.0	-5.7	10.5		67.0	18.7	-4.9

Source: Haver Analytics. *% change on previous quarter, annual rate. †The Economist Intelligence Unit estimate/forecast. §Not seasonally adjusted. ‡New series. **Year ending June. ††Latest 3 months. ‡‡3-month moving average. §§5-year yield. †††Dollar-denominated bonds. Note: Euro area consumer prices are harmonised.

Markets

In local currency	Index Apr 3rd	% change on: one week	Dec 29th 2023
United States S&P 500	5,211.5	-0.7	9.3
United States NAScomp	16,277.5	-0.7	8.4
China Shanghai Comp	3,069.3	2.5	3.2
China Shenzhen Comp	1,768.0	3.8	-3.8
Japan Nikkei 225	39,451.9	-3.2	17.9
Japan Topix	2,706.5	-3.3	14.4
Britain FTSE 100	7,937.4	0.1	2.6
Canada S&P TSX	22,112.5	nil	5.5
Euro area EURO STOXX 50	5,069.2	-0.2	12.1
France CAC 40	8,153.2	-0.6	8.1
Germany DAX*	18,367.7	-0.6	9.6
Italy FTSE/MIB	34,480.9	-0.8	13.6
Netherlands AEX	884.1	0.6	12.4
Spain IBEX 35	11,032.3	-0.7	9.2
Poland WIG	82,863.2	1.6	5.6
Russia RTS, $ terms	1,157.4	2.4	6.8
Switzerland SMI	11,616.9	-0.8	4.3
Turkey BIST	8,945.8	1.6	19.8
Australia All Ord.	8,033.6	-0.5	2.6
Hong Kong Hang Seng	16,725.1	2.0	-1.9
India BSE	73,876.8	1.2	2.3
Indonesia IDX	7,166.8	-2.0	-1.5
Malaysia KLSE	1,537.0	0.4	5.7

	Index Apr 3rd	% change on: one week	Dec 29th 2023
Pakistan KSE	67,756.1	1.8	8.5
Singapore STI	3,222.7	-0.9	-0.5
South Korea KOSPI	2,707.0	-1.7	1.9
Taiwan TWI	20,337.6	0.7	13.4
Thailand SET	1,375.7	-0.4	-2.8
Argentina MERV	1,212,639.0	-0.1	30.4
Brazil BVSP*	127,318.4	-0.3	-5.1
Mexico IPC	57,503.4	0.2	0.2
Egypt EGX 30	27,937.2	-1.0	12.2
Israel TA-125	2,007.4	-1.3	6.4
Saudi Arabia Tadawul	12,622.2	0.1	5.5
South Africa JSE AS	74,097.9	0.3	-3.6
World, dev'd MSCI	3,409.6	-0.8	7.6
Emerging markets MSCI	1,043.2	0.6	1.9

US corporate bonds, spread over Treasuries

Basis points	latest	Dec 29th 2023
Investment grade	105	154
High-yield	346	502

Sources: LSEG Workspace; Standard & Poor's Global Fixed Income Research. *Total return index.

Commodities

The Economist commodity-price index, 2020=100	Mar 26th	Apr 2nd*	% change on: month	year
Dollar Index				
All Items	131.0	130.8	3.5	-2.4
Food	143.3	144.6	9.2	1.0
Industrials				
All	120.8	119.5	-1.7	-5.6
Non-food agriculturals	139.1	138.3	2.9	6.6
Metals	116.1	114.7	-3.0	-8.8
Sterling Index				
All items	133.3	133.8	4.9	-2.8
Euro Index				
All items	138.2	138.9	4.5	-0.6
Gold				
$ per oz	2,176.2	2,258.9	6.2	11.7
Brent				
$ per barrel	86.6	88.9	7.3	4.7

Sources: Bloomberg; CME Group; Fastmarkets; FT; LSEG Workspace; LME; NZ Wool Services; S&P Global Commodity Insights; Thompson Lloyd & Ewart; Urner Barry; WSJ. *Provisional.

For historical indicators data, visit economist.com/economic-and-financial-indicators

OBITUARY
Paul Alexander

The last man to live in an iron lung died on March 11th, aged 78

ROLLING IN THE Texas dirt to feel the life in it. Creeping after bugs in the bushes. The intense smell of the clover he pulled up for his rabbits in the front yard. Wind in his face, fresh and soft. Racing with his friends as fast as possible, until he was exhausted. Cows gently nuzzling him, which made him feel alive. Even the smell of their patties was good.

Then it all disappeared: both that living, and the amazing world. At just six, he was confined almost completely. He could not tell how, because his limbs no longer moved. Through the water-trickles on his breathing tent he could dimly make out the shape of his mother, and hear her, so after a terrifying interval he knew he was not dead. But a tracheotomy to suction out his lungs had turned off his power to speak. In a whisper through his still-working mouth, he told her he was going to be all right.

Paul Alexander was one of thousands of American children who caught polio in the 1950s, and one of the severest cases to survive. He did so because he was encased in a metal tube, an iron lung, which regularly pumped in air and then extracted it to force his immobilised lungs to work. Only his head was still free and in the world. In the air and without the machine, he would suffocate. Most victims stayed in the lung for a short time, either quickly dying or recovering. Since he remained paralysed from the neck down for life, he depended on his for seven decades.

His attitude to it was complicated. The sound of it, chugging and puffing, was often comforting, like an old steam train at rest. It was a stalwart companion, and indispensable. But it could also fail him. In a power cut, family and neighbours had to hand-pump the bellows; when it began to leak, in 2015, a desperate search began for antique parts, since no one used iron lungs any more. But his chest was too damaged for more portable devices. Sometimes he called the iron lung "she", almost tenderly; sometimes "it", his oppressor, which had to be unlocked by someone else even when he only wanted to relieve himself. A prison, or his home.

Besides, the iron lung was not all he relied on. During his two years in Parkland Hospital he survived on a mixture of terror, pain, hope and sheer determination. Polio was the Demon, stalking up and down his spine, shooting out everything that worked like a baddie in a Roy Rogers film. But he would beat him, because he was a Greek, with a Greek father and a Lebanese mother, and Greeks were hero-kings like Alexander, unyielding spirits. He was even extra-special, a fair-haired blue-eyed Greek in a dark-haired family, which meant he was intended for great deeds.

Second, though his arms and legs might not work any more, God didn't want him to die just then. The doctors said he wasn't worth saving, but he knew he was. He would prove them wrong, as well as the callous unskilled nurses who ignored his whispered pleas. To get out of the hospital, he stopped eating, to make them all think he should go home to die. Once home to his mother's wonderful cooking, he grew strong and thrived.

And how. Thanks to his father, who was ingenious at making gadgets, he used a supply of plastic sticks to hold brushes, pencils or pens in his incredible, versatile mouth. He was sure he could be a great artist, and an independent man. Thanks to home schooling, he graduated from Samuell High School in Dallas second in his class. He went to Southern Methodist University, then to Texas Law. After passing the bar exam he set up an office in downtown Dallas, where clients were astonished to find him lying in a machine. His dream was to be a trial lawyer, so he became one, appearing in court in a proper suit and an adapted wheelchair that held him upright to make his case.

For, among his other triumphs, he had taught himself to breathe again. It meant deploying undiscovered muscles in his throat and persuading the epiglottis not to block his windpipe as he forced air into his lungs. "Frog-breathing" was his name for it, after the little gulping creatures he caught in the creek. This was hard, but his reward for succeeding for three minutes was a boxer puppy called Ginger with white stockings, a white chest and fur the colour of honey. She connected him with Nature once more.

The other, wonderful, reward was that for longer and longer spells he could move to a wheelchair and get outside, breathing on his own. On the porch, neighbours' small children would crowd round to kiss him. Older friends could push him back to the creek and the woods, even laying him on the ground to search for bugs in crannies. At SMU, still living with his parents, other students helped him get to classes. At Texas Law in Austin he stayed, sleeping in his iron lung, in student accommodation. Again, with the help of friends, he managed. Life was beautiful.

Friendships were often difficult, though. It had been hard, after all, even to fit back into his family where he had left off. He was included in everything possible, but could not share their lives as before. His voice had returned as soon as the tracheal tube had been removed, but he had to speak loudest to make demands, as loudly and insistently as the alarm bell his father had once rigged up for him. That deterred some people, and meant he tended to live alone, with friends and carers dropping in. It didn't bother him. He drew joy from the callers he had.

His closest friends were the women with whom he fell in love, or they with him. One, Kathy Gaines, looked after him like a sister for years. Another, beautiful Claire, came close to marrying him, until her mother cruelly intervened. Parents could see only the huge, ugly iron lung and the tedious burden of care. Their daughters, however, saw a man who could plan, create and succeed, as well as love. He could also escape, for as much as a day or so, from the machine. Old delights flooded back then. The sweet smell of honeysuckle; the wind fresh in his face; his body enclosed not by metal but by a soft, warm embrace. ■

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