

The Economist

The Middle East on the brink

Taxing tourists

Venezuela's stolen election

The cynic's guide to industry awards

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CHINESE BUSINESS GOES GLOBAL



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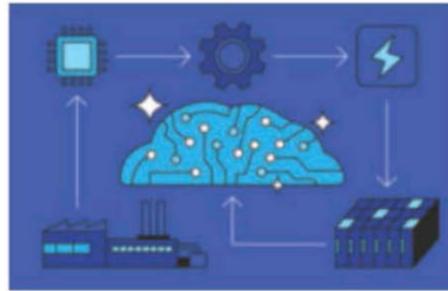
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The world this week Politics



At least 20 protesters were reportedly killed in clashes with police after Nicolás Maduro was declared the victor of Venezuela's presidential election by the country's electoral commission. The opposition says exit polling showed that its candidate, Edmundo González, was the clear winner in the high-turnout contest. It has been unable to obtain results from many polling stations. America called for the immediate publication of the precinct-level polling. Nine countries in the region, including Argentina and Peru, called an emergency meeting of the Organisation of American States, which said the vote was unreliable. China, Iran, North Korea and Russia congratulated Mr Maduro.

Ismael "El Mayo" Zambada and Joaquín Guzmán López, two leaders of the Sinaloa drug cartel in Mexico, were arrested in El Paso, Texas. Mr Guzman is a son of Joaquín "El Chapo" Guzmán, who is serving a life sentence in a Colorado prison. A lawyer for Mr Guzmán junior said he had not made a plea deal with American authorities. He had apparently tricked Mr Zambada into flying to El Paso, though Mr Zambada's lawyers say their client was kidnapped.

One by one

Israel said that a rocket fired by Hizbullah killed 12 children and teenagers at a football ground in a Druze village in the Golan Heights. Israel retaliated with a strike on Beirut's southern suburbs, a Hizbullah stronghold, killing Fuad Shukur, the militia's top military commander. Shortly after, Ismail Haniyeh, Hamas's most senior political leader, was killed in a

strike in Tehran, which he was visiting. Israel also claimed that it had killed Muhammad Deif, the overall commander of Hamas's military wing, in a strike on Gaza on July 13th.

Masoud Pezeshkian was sworn in as Iran's ninth president (Ismail Haniyeh had been in Tehran for the inauguration). He has promised to fight corruption, fix the ailing economy and improve relations with the West, but will probably struggle to implement any major reforms.

Israel's military prosecutor opened an investigation into a group of soldiers accused of sexually abusing a Palestinian prisoner held at a detention camp. That prompted a mob of Israelis to storm the base where the soldiers were detained. Hours later there was a riot at another base, home to Israel's military court. Several right-wing lawmakers joined the demonstrations. Herzl Halevi, the army chief, said the scenes were "bordering on anarchy".

Separatist rebels and jihadists in Mali reportedly killed dozens of mercenaries from Russia's Wagner Group who were in a convoy with troops from the west African country. The attack near the Algerian border is the worst known loss for Wagner in Africa.

Jacob Zuma, the former president of South Africa, was finally booted out of the African National Congress. The 82-year-old upended the country's politics in May by leading his new party, uMkhonto weSizwe, to third place in a general election, depriving the hitherto hegemonic ANC of its national majority.

Ethiopia floated its currency, ending decades of efforts to manage the value of the birr. The decision was approved by the IMF, which hours later announced loans worth \$3.4bn over four years. Relations with the fund had been hampered by the war in the Tigray region.

At least 166 people were killed in landslides caused by heavy rains in India's southern state of Kerala. Scores more are thought to be buried under the mud and rubble.

The junta in Myanmar extended the country's state of emergency, which has been in place since a military coup in 2021, for another six months. The army has lost vast swathes of territory to various groups of ethnic rebels, who have started to co-ordinate their operations.

Judicial review

Joe Biden proposed a radical overhaul of America's Supreme Court, including 18-year term limits for its justices. Kamala Harris endorsed the plan, though it is unlikely to come to fruition. Mike Johnson, the speaker of the House of Representatives, said the Democrats wanted to change the court because they disagree with its recent decisions and that the proposal was "dead on arrival".

Ms Harris raised \$200m in her first week as the Democrats' presumptive presidential candidate, according to her campaign. That is more than Mr Biden raised in the first three months of the year. The polls show her now running neck and neck with Donald Trump.

The man who plotted the terrorist attacks of 9/11, Khalid Sheikh Mohammed, and two of his abettors have agreed to plead guilty to conspiracy and murder in a deal that will see them imprisoned for life rather than face the death penalty. The three men have been in American custody since 2003 and are being held at Guantánamo Bay.

Southport, a seaside town in Britain, became the scene of one of the country's most tragic mass stabbings. A 17-year-old youth has been charged with entering a children's Taylor Swift-themed dance class with a knife, killing three girls, all under ten years

old. Eight other children and two adults who tried to protect them were seriously injured. A vigil for the victims was overshadowed by violence after suspected far-right protesters clashed with police.

Britain's new finance minister, Rachel Reeves, said she had discovered a £22bn (\$28bn) hole in the country's public finances. She claimed that the previous government covered up the financial mess and left an "unforgivable" inheritance. The previous Tory finance minister, Jeremy Hunt, rejected her claims, saying that the overspend was a result, among other things, of Labour's decision to raise public-sector pay.

Russia said it had taken control of Pivdenne in Ukraine's Donetsk region, as it continued its slow but steady progress against Ukrainian forces. Pivdenne lies just outside Toretsk, a coal-mining town, where Ukraine has so far held the line. Russia claimed to have also captured two villages on the road to Pokrovsk, a transport hub 70km (43 miles) west of Toretsk. Meanwhile Russia launched one of its biggest drone attacks across Ukraine since the start of the war.



After a culturally sophisticated and provocatively *outré* opening ceremony, the Olympics got under way in Paris. Heavy rain led to increased pollution in the Seine, causing the men's triathlon to be delayed (the swimming leg was held in the river). Suspicion fell on left-wing groups for sabotaging the French rail network on the opening day and telecoms networks two days later.

The world this week Business

The **Bank of Japan** raised its benchmark interest rate for only the second time in 17 years, to 0.25% (it increased the rate in March for the first time since 2007). It also plans to reduce its ¥6trn (\$39bn) monthly bond purchases by half by the spring of 2026. Japanese government officials had been uncharacteristically vocal in their desire to see the bank halt the decline of the yen. The weakened currency has fuelled inflation, which has remained above the bank's 2% target for 27 months.

The Federal Reserve made no changes to its main interest rate but left the door open for a cut in September. Earlier data suggested the **American economy** grew at an annualised rate of 2.8% in the second quarter, double the 1.4% expansion in the first quarter.

The **euro zone's** GDP grew by 1% on annualised basis in the second quarter (or by 0.3% on a straight comparison with the first quarter). Germany's economy contracted again by whatever measure was used.

Boeing reported a \$1.4bn quarterly net loss, in part because the extra safeguards it is putting in place to tackle quality issues have slowed down production. Its defence and space division also racked up an operating loss. Meanwhile, the company named Kelly Ortberg as its new chief executive. Mr Ortberg used to run Rockwell Collins, which supplied Boeing with electronics. He retired in 2021.

Boeing is not the only aerospace company with big problems. **Airbus** recorded a higher-than-expected charge of almost €1bn (\$1.1bn) related to its space business. It has already cut its target for deliveries of commercial planes.

Microsoft reported a solid set of earnings for the second quarter, with revenue from its Azure cloud division up by 29%, year on year. Still, that

figure was slightly below market expectations, which Microsoft blamed in part on capacity constraints for artificial intelligence, where demand is racing ahead of its ability to provide services. The company said its investments in AI would continue to increase. Capital spending hit \$19bn in the quarter, a rise of 80%.

Meta also announced an increase in spending on AI in its earnings. "I'd rather risk building capacity before it is needed rather than too late," said Mark Zuckerberg. Separately, Meta reached a settlement with Texas over claims that its now-obsolete facial-recognition system gathered biometric data from Texans on Facebook without their permission. Meta is paying \$1.4bn to settle the charges, the largest amount ever obtained from an action brought by a single state, according to Texas.

AI, AI, oh

Meanwhile, another **global outage** hit Microsoft's systems, this time a cyber-attack on its email service and its Minecraft video game. The effects of the recent worldwide interruption to Microsoft systems from a faulty update distributed by

CrowdStrike, which provides security software, continued to reverberate. Delta Air Lines said it lost \$500m because of the disruption.

The US Consumer Product Safety Commission decided that **Amazon** is legally responsible for defective goods from third-party sellers on its website, and must issue safety recalls and notify consumers if a product is faulty. Amazon is appealing against the decision.

BP and **Shell** reported bumper quarterly profits. BP said it would build its sixth oil platform in the Gulf of Mexico, underlining the continuing importance of fossil fuels to big energy companies. Shell posted a loss in its renewables business. The company recently shelved a biofuels project in Europe because of poor market conditions in that industry.

Air New Zealand ditched its short-term climate target, the first big international airline to do so. The carrier had hoped to reduce carbon emissions by 28.9% by 2030 compared with 2019 levels, but that goal ran into headwinds, including the unavailability of fuel-efficient aircraft and unaffordability of

alternative jet fuels. It is also withdrawing from the Science Based Targets initiative, a collaboration among various NGOs, but remains committed to reaching net zero by 2050.

The cinematic universe



"Deadpool & Wolverine" notched up \$211m in **box-office sales** over its opening weekend in America, a record sum for an R-rated film. It took a further \$233m in international markets. "Inside Out 2", meanwhile, has surpassed \$1.5bn in global sales since its release in June, pushing it over the lifetime gross receipts of "Barbie" and "Top Gun: Maverick". "Deadpool & Wolverine" and "Inside Out 2" were made by Marvel and Pixar, two Disney subsidiaries, giving the company a couple of big hits after a few summers of relative box-office wash-outs.



Chinese business goes global

As the West turns away, Chinese companies are gaining ground in the global south

SINCE THE end of the cold war the rich world's corporate giants have been the dominant force in global commerce. Today consumers and workers in almost every country are touched in some way by the world-spanning operations of multinational firms from America, Europe and, to a lesser extent, Japan. These leviathans are now under threat, as Chinese firms in industries from cars to clothing expand abroad with startling speed. A new commercial contest has begun. Its battleground is neither China nor the rich world, but the fast-growing economies of the global south (see Briefing).

The expansion of Chinese business is taking two forms. One is through globalised supply chains. Greenfield foreign direct investment by Chinese firms tripled last year, to \$160bn. Much of that was spent building factories in countries from Malaysia to Morocco. Less noticed is the fact that Chinese firms are also pursuing the 5bn consumers who live in the rest of the developing world. Since 2016, listed Chinese firms have quadrupled their sales in the global south, to \$800bn, and now sell more there than in rich countries. For the West, attempting to deal with China's rise, that holds uncomfortable lessons.

Chinese businesses are looking abroad partly because of slowing economic growth and ferocious competition at home. They are chipping away at the dominance of incumbent multinationals everywhere from Indonesia to Nigeria. Transsion, an electronics firm, produces half of the smartphones purchased by Africans. Mindray is the leading supplier of patient-monitoring systems in Latin America. Chinese makers of electric vehicles (EVs) and wind turbines are expanding in the developing world, which also happens to be home to nine of TikTok's ten biggest markets.

The precise shape of Chinese expansion is, however, a consequence of policies of governments in the West and China. As rich countries erect trade barriers to keep out Chinese goods, including solar panels and EVs, some Chinese firms are attempting to skirt restrictions by shifting production to the global south. At the same time, selling to emerging markets in their own right has become more attractive, too. The companies' path has been smoothed by the efforts of China's government to build diplomatic ties with the global south, notably by facilitating \$1trn of infrastructure investment through the Belt and Road Initiative (BRI). As the West has turned inward, China and the rest of the emerging world have drawn closer.

At a time when globalisation is under attack, this holds an important lesson for policymakers: that trade can bring extraordinary benefits. Billions of lives will be enhanced by a wider choice of cheap, innovative and green goods. Transsion's \$100 smartphones mean that some of the world's poorest people now have at their fingertips all the knowledge and services the internet has to offer. Affordable medical devices will save countless lives. Low-cost climate-friendly technologies make it more likely that developing countries will be able to keep their greenhouse-gas emissions in check even as they get richer and their populations grow.

Another lesson is how costly it is to shelter incumbent Western multinationals from competition. Domestic rivalries mean that Chinese firms, once derided for turning out shoddy copycat products, have mastered the knack of producing goods for low-income consumers in a way that Western companies never did. Chinese firms are now at the cutting-edge of EVs and batteries, precisely the sorts of industries rich-world governments coddle at home. The idea that Chinese brands lack global appeal has been shattered by companies such as Shein, a fast-fashion firm. Sales by Chinese companies in the global south have already overtaken those of Japanese multinationals. On current trends, they will pull ahead of European firms and be on par with American ones by 2030.

For governments in the global south, the lesson is more subtle. Policymakers in host countries have an opportunity to enrich their own consumers, create jobs, and foster innovation and competition. But to do so they will need to steer between protectionism on one hand, and passivity on the other.

As in the West, local industries competing with Chinese companies will cite China's fondness for subsidies and seek special protection. Already, Brazil has introduced tariffs on EVs, and some Chinese exports are facing levies in Indonesia. Yet to shut out Chinese products would deprive consumers of

the benefits of choice and innovation, and shield unproductive and stagnant local industries from competition. But policymakers should also beware of being too lax. Some have already been burnt as BRI debts went sour. Much of the business being done by Chinese firms in the global south today involves only final assembly. Many firms are reported to bring in Chinese workers, rather than hire

locally. For developing economies to truly benefit, they should press Chinese firms to employ more local workers, share technology and heed local environmental and labour standards.

China may well go along with this. Over the years American and Japanese multinationals saw the benefits of training up local staff and imparting know-how, as they sought to be nearer their end markets, reduce costs and avoid a backlash from angry locals. Chinese firms may similarly come to see the benefits of establishing deeper roots in the emerging world. And just as closer commercial ties enhanced the soft power of America and Japan in the late 20th century, so too may China wield greater influence in the global south.

Cede capital

For decades the West was the world's fiercest advocate for globalisation. The consequences of its decision to turn inward to shield itself from Chinese competition will take years to become completely clear. But the world is not standing still. Western multinationals have long been the main agents of cross-border trade and investment, and some of the biggest beneficiaries of openness. Today they are surrendering ground in the world's fastest-growing and most populous markets. China is already reaping the rewards. ■



Venezuela's stolen election

Latin America's new Congo

Peaceful protests and judicious diplomacy might just oust Nicolás Maduro

THERE COMES a moment in a country's descent into dictatorship when a heavily armed regime tries to force millions of people to accept that black is white, bad is good and losers are winners. By so blatantly stealing the presidential election on July 28th, President Nicolás Maduro has ensured that for Venezuela that moment is now (see Americas section).

By every measure except the regime's, the vote was won soundly by Edmundo González. He is an avuncular former diplomat around whom the opposition coalesced after Mr Maduro barred the most impressive opposition leader, María Corina Machado, from running. Exit polls and parallel counts from swathes of separate polling stations all show Mr González winning, with more than 65% of the vote. Yet after a suspicious delay, the electoral authority, run by regime lackeys, announced that victory belonged narrowly to Mr Maduro.

During his 11 years in power, Mr Maduro has grown ever more anti-democratic. This time his regime invented millions of votes to steal a win. The scale of the fraud far outstrips Venezuela's past sham elections. Venezuela is now reminiscent of the Democratic Republic of Congo, one of the world's poorest countries, where millions of votes were fabricated in 2018 to secure the election for the loser. Congo's ruse succeeded. Mr Maduro's must not.

Whether it does depends primarily on ordinary Venezuelans. So blatant is the steal that they may refuse to accept it. Protests have broken out across the country, including in places once seen as bastions of the regime. At least 20 people have died. Caracas, the capital, has been a din of pots and pans. Crowds have toppled at least six statues of the late Hugo Chávez, whom Mr Maduro succeeded in 2013 as leader of the socialist-themed "Bolivarian revolution".

Venezuelans are also fed up with the ruination of their country in a quarter of a century of strongman rule. Under Mr

Maduro, hyperinflation soared (today, inflation is "only" 50%). In the eight years to 2021, the economy shrank by three-quarters. Corruption is rife. Dissidents disappear into dungeons. A quarter of the population—7m people—has fled abroad.

Alas, the army is blocking change, and to get it to abandon Mr Maduro and uphold the constitution's electoral process will be hard. Mr Maduro relies on Cuban intelligence to keep officers in line. The opposition should strive to show in irrefutable detail that the election was stolen. On the back of that, it should stage large, peaceful demonstrations. Many foot-soldiers, whose own families share in the current hardship of Venezuelans, are not necessarily loyal to the regime.

The outside world can do its bit, too. Without full, credible election data, Western powers should reject the official results outright. Failure to provide such data should mean renewed economic sanctions and pursuit by the International Criminal Court for potential crimes against humanity. The West should also use individual sanctions against Mr Maduro's inner circle, including his generals, whose families luxuriate in plush hotels in Madrid and elsewhere.

More crucial will be the role of President Luiz Inácio Lula da Silva in next-door Brazil. An erstwhile ally of *chavismo*, Lula is now frustrated. He, too, has demanded the release of election data. Privately, and ideally with the backing of the left-wing governments in Colombia and Mexico, he should be much tougher and tell Mr Maduro that if he clings on, his usual friends will disown him—and impose sanctions on his family.

The world has one last thing to offer: a safe way out for Mr Maduro and his closest cronies to a comfortable life by a Brazilian or Caribbean beach, possibly with immunity from prosecution. That would outrage those who want to see Mr Maduro face justice at The Hague. But it is a price worth paying to avoid bloodshed and start putting Venezuela back together. ■



The Middle East

Step back from the brink

That still means starting with a ceasefire in Gaza

A WEEK CAN be a long time in war. Until July 27th there was growing optimism that Israel and Hamas were close to a ceasefire that would halt their ten-month conflict. Diplomats and spies from four countries planned to hash out the details at a meeting in Rome. Antony Blinken, America's secretary of state, said the talks were "inside the ten-yard line". Israelis and Palestinians might not have followed the American-football metaphor, but many shared his sentiment.

Then a rocket fired from Lebanon killed 12 children on a football pitch in the Golan Heights. Israel retaliated by bombing Beirut's southern suburbs, to assassinate one of Hizbul-

lah's most senior commanders. Hours later it killed Ismail Haniyeh, the leader of Hamas, in a surprise strike on Tehran. Hopes for a ceasefire then gave way to fears of a bigger regional war (see Middle East & Africa section).

Those fears may not yet be realised. Iran has vowed a response for Mr Haniyeh's killing, but it will probably be reluctant to go to war on behalf of Hamas. Israel and Hizbullah are likewise keen to avoid an all-out barrage of missiles, which would cause immense destruction on both sides of the border.

A sort of deterrence is still holding—barely. But it is getting ever harder to maintain. Combatants in the region are crossing ►►

lines that would have recently seemed uncrossable. Twice this year Israel has bombed Beirut, a city it had not officially targeted since 2006. In April Iran fired a volley of missiles and drones at Israel for the first time ever. The Middle East's old rules of engagement have been erased. Because no one is sure about the new ones, each strike risks escalating to all-out war.

The path to averting such a conflict starts with a ceasefire in Gaza. Mr Haniyeh's assassination will no doubt temporarily halt the talks with Israel. But it will not change the reality in Gaza. Hamas's fighters are exhausted and the public is desperate for relief from a war that has killed almost 40,000 people. That means whoever replaces Mr Haniyeh will face the same impetus to make a deal with the Israelis. But it is still unclear whether Binyamin Netanyahu wants to make one.

The Israeli prime minister has prevaricated for months, fearful that agreeing to a ceasefire would switch Israel's focus back to its internal ills and his own trial for corruption. The hopeful view is that Mr Haniyeh's death gives him an excuse to declare victory and accept a deal. (So too would Israel's announcement on August 1st that it had killed Muhammad Deif, Hamas's military chief, in a strike three weeks earlier.) A more cynical view is that if you want a truce, killing your main interlocutor is a curious way to show it. Perhaps Mr Haniyeh was too valuable a target to leave alive; or perhaps his killing was a way for Mr Netanyahu to sabotage the talks.

The assassinations may have been feats of intelligence and

operations, but they do not change Israel's bleak strategic position. Its war in Gaza has been drifting aimlessly for months; the loss of Mr Haniyeh, a politician who had little say over the fighting, will not weaken Hamas on the battlefield. Nor will assassinating Fuad Shukur, the Hizbullah commander, compel the group to halt its daily fire on northern Israel. A small country cannot keep battling on all fronts indefinitely.

Indeed, the choice for Israel has never been more stark. It can make a deal with Hamas in order to free the surviving hostages from Gaza, bring a measure of calm to its northern border and provide a chance for regional diplomacy. The public, senior army officers and even some right-wing lawmakers support such a step. Or it can spurn a deal in order to continue a war that could spiral out of control at any time—and probably doom the 115 hostages who remain in Gaza as well.

America has vowed to protect Israel. In recent days it quietly sent an aircraft-carrier strike group back to the Persian Gulf. Deterring Iran and its proxies is only part of the equation, though. President Joe Biden has spent months trying to cajole Mr Netanyahu into a ceasefire, and he has vowed to spend the final months of his presidency pursuing one. It is past time for Mr Biden to get tough and threaten real consequences if the Israeli prime minister continues to refuse. That may clash with his pro-Israel instincts. But if he does not press harder, the outcome may be worse for the region, including Israel itself: a ruinous conflict that no one can control. ■

Britain's economy

The problem with Labour's growth plan

The risk is not too much interventionism, but too little audacity

THE LABOUR PARTY'S first month in power has given scaremongers plenty to work with. Britain's new government has begun to unveil what looks to be the most interventionist economic agenda the country has seen in the past 50 years. Railways are to be re-nationalised. An activist state is spending billions on industrial policy and setting up a new energy behemoth (see Britain section). Teachers and doctors will receive big pay increases. A workers' rights agenda is to come—as are, almost certainly, increases in taxes on capital gains.

Tilt the lens slightly, though, and this programme appears less alarming. Labour's enthusiasm for industrial policy is never going to be something that *The Economist* shares. But the details differ from the slogans. Behind the statist rhetoric, Labour's actions so far amount to a fairly orthodox agenda of supply-side economic reform. Indeed, if anything, the big risk to the mission of boosting growth is not Labour's headstrong interventionism, but its lack of audacity.

Look first at what the government does, rather than what it says. GB Energy, a new publicly owned entity, was first billed as a state-run energy supplier. But what Labour has set up is closer to a regulatory concierge; its initial focus is on shepherding offshore-wind projects through onerous approval processes before selling them on to private developers. A new National Wealth Fund (NWF), designed to catalyse private funding in green industries, is to be run at arm's length from government

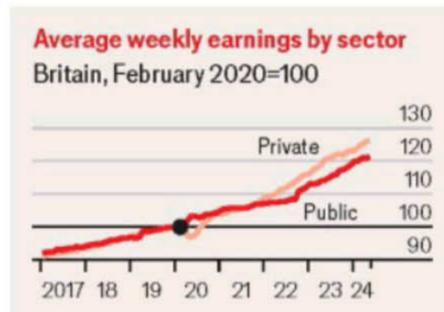
by City financiers. Taking charge of the railways is, in some ways, a formalisation of existing arrangements, after the state bailed out train operators during the covid-19 pandemic.

Britain's frail public services need better funding; those pay increases were recommended by independent bodies and match gains made by workers in the private sector. And the government's early steps on the planning system—approving solar farms, lifting England's onshore-wind ban, making housing targets binding and signalling a willingness to build on the green belt—have all been encouraging.

Opportunities will certainly arise to boost interventionism. Ed Miliband, the energy secretary, seems keen that GB Energy should eventually own and operate wind farms and other ventures. The steel industry, which governments of all stripes have propped up in defiance of economic logic, features heavily in the NWF's mandate. If not carefully drafted,

Labour's planned employment law risks gumming up Britain's labour market. It was only in February that Labour dropped its commitment to a colossal £28bn (\$36bn; 1.2% of GDP) in annual green spending: what might it do if it had the cash?

Despite that fear, the evidence so far suggests the risk is not that Labour is too red, but too timid. "Treasury brain", the finance ministry's penny-pinching scepticism about plans for long-term spending, beats big-state mania but it is hardly a recipe for productivity growth. Rachel Reeves's first fiscal



► announcements as chancellor on July 29th suggest that she has a nasty case of the disease. “If we cannot afford it, we cannot do it,” she has repeated, inverting John Maynard Keynes’s dictum that “anything we can do, we can afford”.

To help fill a hole in this year’s public finances, she cut nearly £800m-worth of transport investment, including projects that have languished for years in planning purgatory—a strange signal for a politician who, in opposition, decried stop-go capital investment. Her search for new savings risks more raids on capital budgets in the National Health Service, where the cumulative cost of the efficiency-wrecking maintenance backlog was already projected to exceed £15bn by 2028.

Labour has shown no appetite for difficult-but-vital reforms like rationalising Britain’s growth-choking property taxes. On

Brexit, the country’s single biggest productivity headache, the mood music with Europe is better than it was under the previous Tory government, but incrementalism still reigns. On planning, the real test of Labour’s mettle will be whether it can shift to a more rules-based system; on devolution, it will be how much control and cash it gives up to local authorities.

Stability and orthodoxy make for a much more appealing economic pitch than unfettered *dirigisme*. But it is not a million miles from the promises of Rishi Sunak and Jeremy Hunt, who took over after the chaos of Liz Truss’s government. A serious agenda for growth needs more than an iron chancellor: it also requires changes to the way the government thinks about transport, housing, taxation, Europe and more. The real danger is that Labour does too little, not too much. ■

The travel boom

All inclusive

Taxes can make tourism work for locals and visitors alike

THE DOLLAR is hovering near a two-decade high. That has unleashed a multitude of American tourists keen to exercise their newfound spending power, much to the dismay of snobbish Europeans and anyone who has a fondness for empty, unspoiled beaches. And it has done so at a time when tourism is back in fashion. Trips were up by 19% in the first quarter of this year, compared with a year ago. They are forecast to exceed pre-covid levels across the whole of the year.

But tourism’s revival is being met by a backlash. Popular destinations including Barcelona, Dubrovnik, Majorca and Santorini have either introduced or are considering limits on cruise ships. Japan is erecting barriers to prevent tourists gathering to gawp at Mount Fuji. Tens of thousands of protesters in Barcelona and the Balearic Islands have even called for an end to “mass tourism” (see Finance & economics section).

The arguments underpinning the protests are misguided—as are many of the policies they inspire. Tourism is a useful source of revenue. Policymakers can find ways to make it more bearable and more lucrative at the same time. These do not involve bans on tourists or making destinations less attractive. Instead, countries should pursue a more capitalist solution, by exercising their pricing power.

Tourism is big business. On a broad estimate, the industry earned \$3.3trn last year, equivalent to 3% of global GDP and 6% of cross-border financial flows. For host countries, it is a welcome source of jobs as well as revenue. The unemployment rates that spiked above 20% in much of southern Europe in the 2010s would have been higher still had it not been for the millions of visitors who came to soak up the sun.

The problem, though, is that individual visitors inevitably fail to take into account the effect they have on others. Congestion is a headache for residents and tourists alike. Having to compete with the crowds for flat rentals, seats on a bus and space on pavements spoils the quality of life for city residents as much as it does the holiday experience for tourists.

Taxes can help, by ensuring that tourists pay for the congestion costs they impose. In some places taxes may deter the

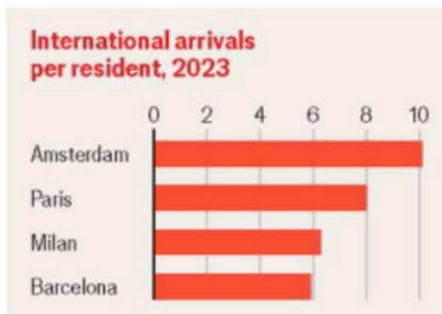
crowds. Travellers seeking lovely beaches have lots of options, for instance. If Thailand were to make visiting more costly, tourists would go to Vietnam instead. Indeed, one study finds that every 10% increase in tourist taxes in the Maldives leads to a 5% reduction in visitor numbers.

In some places the crowds might still come. Evidence suggests that tourist taxes are mostly ineffective at dissuading people from visiting destinations with standout attractions that cannot be found elsewhere, such as Barcelona’s Sagrada Familia. People respond by reallocating spending, for example by choosing a cheaper hotel, rather than cancelling trips.

However, that is not a reason for despair. For one thing, imposing much higher levies might have more of an effect on numbers. The taxes that already exist are set at paltry levels. In October Barcelona’s nightly hotel tax will increase, but only to €4 (\$4.30); a day-pass to enter Venice sets you back a mere €5, which would barely cover a cup of coffee in St Mark’s Square. The market could bear much higher prices.

If visitors are willing to go elsewhere, underdeveloped tourist sites could then have a chance to attract their business. If people insist on visiting the hot spots, extra taxes levied via airlines or hotels could pay for infrastructure that makes life better for tourists and residents alike. In addition, other measures can encourage people to spend time in less congested places or neighbourhoods. As well as erecting barriers, Japanese authorities more sensibly sometimes impose a congestion charge on Mount Fuji. Copenhagen offers ice cream to tourists who do a bit of litter picking. Once the pricing is right, residents who are still grumpy or who hate crowds have the freedom to move somewhere else.

Some might object that tourist taxes are unfair, because they stop young or poor visitors from seeing the world. Yet tourism is always unequal. And passes or tax-free travel could be granted to students or unemployed people, as happens at many museums. Venetians may shake their fists when a fresh boatload of cruise passengers arrives; they should instead be rubbing their hands in glee. ■



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
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Founding the Secret Service

It is urban legend, not historical truth, that the “law creating the Secret Service was signed by Abraham Lincoln on April 14th 1865” (“Off-target”, July 20th). Actually, the Secret Service Division of the Treasury Department, as it was known, came into being through nothing more than a brief written order by that department’s chief legal officer on July 5th 1865. Though your article correctly notes that the unit’s initial purpose was to investigate counterfeiting, not protecting the president, there was no relevant vote in Congress (which was adjourned).

The precise origins of the story appear to lie in an actual fact. Lincoln met Hugh McCulloch, the secretary of the treasury, on April 14th 1865. The juxtaposition of this meeting with the president’s assassination later that night at Ford’s Theatre seems to have suggested a more-dramatic-than-real narrative to subsequent writers. The embellishers include two former Secret Service officials who, in 1960, included a version of the tale in a history published with the approval of the agency itself.

However, not a shred of contemporaneous documentation supports the story. McCulloch’s own detailed memoir in 1889 discusses his final meeting with Lincoln but makes no mention of the Secret Service.

Congress did not pass a law expressly providing for a Secret Service Division until 1882. In the intervening 17 years, great controversy had developed over the Secret Service, in part because southern legislators were angry at how it had been used to infiltrate the Ku Klux Klan in the former Confederacy and in part because undercover Secret Service men had skimmed money or helped Republicans carry out various political dirty tricks. The 1882 legislation accordingly specified that the Secret Service’s mission would be to fight counterfeiting “and no other purpose whatever”.

This language is notable

given the assassination of President James Garfield in just the previous year, 1881. Still, it did not prevent the executive branch from deploying Secret Service men, informally, as occasional bodyguards for President Grover Cleveland midway through his second term (1893 to 1897), or, indeed, as espionage agents during the Spanish-American war, which broke out in 1898. As *The Economist* correctly notes, Congress did not authorise the Secret Service to protect presidents until 1901, after the assassination of William McKinley.

CHARLES LANE

Author, “Freedom’s Detective: The Secret Service, the Ku Klux Klan and the Man who Masterminded America’s First War on Terror”
Washington, DC

A failure to communicate

Schumpeter was spot-on in his review of Boeing’s failings, which do indeed amount to corporate criminality (July 13th). There are two additional aspects worth noting. Boeing failed to have an internal regulator inspect, test and ensure the safety of its systems. And arguably an even greater shortcoming lies with the independent external regulator, the Federal Aviation Administration, which got too close to Boeing. The FAA neglected its own properly independent inspection and testing, particularly of safety-critical and safety-significant systems.

JOHN CHURCHILL
Christchurch, Dorset

Supply shocks and inflation

“In theory, central bankers should ignore supply shocks,” you say (“The end of the beginning”, July 6th). I disagree. Central banks should never ignore supply shocks. By definition, supply shocks affect an economy’s ability to produce goods and services. Inflation will rise if overall supply contracts, unless the central bank raises interest rates to reduce demand. Although monetary policy primarily affects aggregate demand, it must also react

to supply shocks to keep supply and demand in balance if it wants to stabilise inflation. This is true whether the supply shock turns out to be temporary or persistent.

Fighting inflation is not rocket science. The Federal Reserve’s Monetary Policy Report contains several rules for setting monetary policy that perform well in a variety of economic models. None of them requires central banks to know whether inflation has risen because of a supply shock or a demand shock, or to know how long a shock will persist. The rules call for responding to actual inflation, as well as measures of real economic activity, such as the unemployment rate.

Ignoring the guidelines that these rules provide, as the Fed did in 2021 when inflation soared above its 2% target, risks a repeat of the 1970s, when temporary inflation shocks from oil prices led to sustained increases in inflation. Belated interest-rate rises in 2022 and 2023 have helped ensure that the temporary supply (and fiscal) shocks produced only a temporary rise in inflation. Central banks committed to low and stable inflation cannot ignore supply shocks either in theory or in practice.

CARL WALSH

Professor of economics emeritus
University of California,
Santa Cruz

Labour must build trust

The Conservative Party did not lose its desire to govern overnight (Bagehot, July 20th). Rather, its ambition receded as the never-ending parade of scandals forced it onto the back foot. From David Cameron to Owen Paterson to Scott Benton, repeated lobbying scandals have tainted public perceptions of politics more than anything else. For all its important announcements on energy and house-building, restoring trust is where the new Labour government must begin.

The blame also lies with the

2014 Lobbying Act. It is so riddled with exemptions that it keeps the vast majority of lobbying in the shadows. If the new government wants to avoid the briefest of honeymoons and ensure its efforts resonate with bruised, sceptical voters, it needs to rebuild trust, and quickly.

ALASTAIR MCCAPRA
Chief executive
Chartered Institute of
Public Relations
London

The death of data

It is not true that “Unlike bodies, data do not decay” (“A date with destiny and your data”, July 13th). The devices on which the data are stored decay after a few decades at the most. The preservation of data requires that they continually be copied from old to new storage media. Any crisis that interrupts the data transfer, such as war, pandemic, or economic collapse, will also destroy the historical record. You admit that “Not all data can be saved,” which is regrettably true for historical as well as personal data. Paper copies are the only durable backup.

FREDERICK PILCHER
Las Cruces, New Mexico

Summer reading

Bartleby is right that literature provides excellent guidance for managers (July 13th), pointing out that Virgil and Tom Sawyer are great leaders, whereas Richard III, Macbeth and Captain Ahab are not. During the dog days of summer, we may all sometimes feel like Herman Melville’s Bartleby, the columnist’s namesake, who when faced with jobs, tasks and suggestions, replied: “I would prefer not to.”

CAROL WESTON
Armonk, New York

George Orwell’s “Animal Farm” also provides useful insight for those who wish to ascend from cubicle to corner office, and sad reminders for those who stay on the farm with them.

JEEVANI SUBASINGHE
London

Briefing Chinese business



Going out

SINGAPORE

Chinese firms are growing rapidly in the global south

FOR DECADES the world's corporate titans have seen China as an essential place to do business. Chinese firms, it turns out, were no different. Their domestic market was vast and growing at a dizzying pace, so they had little reason to hunt for customers abroad. China's colossal manufacturing sector, meanwhile, with its legions of cheap workers, made producing goods elsewhere unnecessary. In spite of the fuss in much of the rich world about Chinese investment, Chinese firms have a comparatively small global footprint.

Firms listed in China generated a mere \$1.5trn in foreign revenue in 2023, whereas those listed in America took in \$5.8trn and their European counterparts \$6.4trn. China's stock of outbound foreign direct investment (FDI) was equivalent to just 17% of its GDP last year, compared with 34% for America and 49% for Germany. Many of those investments, moreover, focused on securing access to raw materials or acquiring foreign intellectual property. Even China's status as the world's biggest exporter

is slightly misleading: a big, although shrinking share of what it ships abroad is produced by foreign businesses.

This relatively inward focus is now changing—quickly. Since 2016 Chinese firms' foreign sales have more than doubled. Their greenfield FDI (building a new mine or factory, say, rather than buying one) surged to a record \$162bn last year, up from \$50bn a year before, according to fDi Markets, a data provider. Nearly three-quarters of that was in manufacturing.

Home affront

This outward expansion is a reflection of the dwindling allure of China's domestic economy. It no longer grows as zippily as it once did. It is also fiercely competitive, plagued by price wars in industries from cars to wind turbines. Even excluding the troubled property sector, the average return on invested capital for China's listed non-financial firms was a meagre 4.9% last year, compared with 6.6% for European companies and 8.7% for American ones.

The faltering domestic economy has induced ever more Chinese firms to “go out”, to use a slogan with which the government cajoled them to invest abroad in the early 2000s. Many would like to increase sales in rich countries, which account for three-quarters of consumer spending outside China. Expanding in those markets, however, has become tricky for Chinese firms as the political mood has shifted against them. Chinese carmakers have been slapped with hefty tariffs on both sides of the Atlantic. Western politicians grumble about Shein and Temu, two fast-growing Chinese e-emporia. TikTok, a short-video app, faces a ban in America unless its Chinese parent, ByteDance, sells it.

Some Chinese firms are trying to skirt trade barriers by shifting production from China to other developing countries. That is an approach long taken by Chinese solar firms, which were, in effect, locked out of the American market in 2012 by anti-dumping duties. America imports almost no solar panels directly from China, but

buys lots from South-East Asia, where Chinese firms like JinkoSolar, Trina Solar and Longi, the world's three largest producers of solar modules, have built big factories.

That strategy is now being emulated in other industries, which explains Chinese firms' surging investment in manufacturing abroad. Although some factories are being built in the West, the lion's share of activity is in the global south, home to nine of China's top ten destinations for greenfield FDI last year (see chart 1). In July BYD, a Chinese electric-vehicle company, opened a new car factory in Thailand, its first in South-East Asia. CATL, a Chinese battery firm, is expanding production in South-East Asia and reportedly exploring investments in Morocco and Turkey.

Trade data suggest that these new factories rely heavily on imported Chinese components rather than local supply chains. In the top ten destinations for Chinese greenfield FDI, imports from China of intermediate goods used in manufacturing have nearly tripled over the past decade. COSCO, a Chinese shipping giant, recently added capacity between China and Mexico, in large part to ship more to factories near Mexico's border with America.

Johnson Wan of Jefferies, an investment bank, reckons the main reason Chinese firms are building factories abroad is to avoid tariffs. Proximity to China's robust supply chains has typically been a competitive advantage for Chinese firms, notes Guoli Chen of INSEAD, a French business school. True, factory wages in China have risen sharply, quadrupling since 2010 to over \$8 an hour, well above the average in South-East Asia. But manufacturing at home is usually still the cheaper option, thanks to China's huge economies of scale and well-developed infrastructure.

In time, though, the commercial rationale for manufacturing abroad will strengthen. Over the past decade China's Belt and Road Initiative has channelled more than \$1trn of investment into power



networks, railways and ports across the global south (much of which has flowed through Chinese firms such as State Grid, a power company, CRRC, a maker of trains, and COSCO). Those investments have made recipient countries more attractive places in which to manufacture.

For Chinese firms, that is just as well. Western governments are beginning to crack down on their use of factories in the global south in effect to disguise the origins of largely Chinese-made goods. In June American tariffs were extended to many of the solar products made by Chinese firms in South-East Asia, after the Department of Commerce judged that the factories in question were adding little value beyond final assembly.

Aurora australis

Another popular strategy for intrepid Chinese firms encountering growing hostility in the West is simply to peddle their products elsewhere. According to *The Economist's* calculations, drawing on estimates from Morgan Stanley, a bank, listed Chinese firms have nearly quadrupled their sales in the global south since 2016, whereas Western firms have grown theirs by only a third. The \$800bn in sales Chinese firms made in these countries last year exceeded what they made in rich ones (see chart 2).

Chinese companies battling Western rivals at home have tended to start by offering cheap alternatives. That has left them well positioned to serve poorer consumers in the global south. Half of the smartphones purchased by Africans are made by Transsion, a Chinese company that sells many of its devices for less than \$100 under such brands as Tecno, Infinix and Itel. Chinese makers of household appliances, including Haier and Midea, are also dominant in Africa. Brazilians and Mexicans are among the biggest consumers of Shein's inexpensive clothing.

As Chinese firms have honed their mastery of manufacturing, they have shed their reputation for poor quality, at least in the global south, note Lourdes Casanova and Anne Miroux of Cornell University. That has helped them sell more complex products, too. In Thailand Chinese carmakers including SAIC and BYD accounted for 18%

of sales in 2023, up from just 6% in 2020, according to MarkLines, a data provider. They account for half of the cars sold in Russia, which Western rivals have abandoned since its invasion of Ukraine. Mindray, a Chinese maker of medical equipment, is the leading supplier of patient-monitoring systems in Latin America. Chinese makers of wind turbines, such as Goldwind and Envision, have also been expanding sales in emerging markets.

Chinese firms will find it easier to sell in the global south if they shift production there, too. Transsion, for example, has a factory in Ethiopia, which allows it to distribute phones across Africa quickly and cheaply. Producing locally also fosters goodwill. Whereas Westerners are increasingly suspicious of China, many in the developing world think it plays a positive role in their domestic economy, according to Pew, a research centre (Indians are a notable exception). Building factories in poorer countries helps reinforce that view and casts China as a spur to development, rather than a threat to local livelihoods.

In a testament to its strengthening brand, China Inc is gaining momentum in the global south even in industries that do not rely on its manufacturing prowess. Cotti Coffee, a Chinese coffee chain founded in 2022, now has more than 7,000 stores across Asia and the Middle East. Of the ten countries with the most TikTok users, nine are in the developing world.

All this should ring alarm bells at Western multinationals. They have been steadily edged out of China in recent years by home-grown competitors. Many harbour ambitions to expand instead in the same fast-growing economies in which their Chinese rivals are now gaining sway. As recently as 2016 listed American and European firms together generated 15 times the foreign sales of Chinese firms in the global south. That ratio has since shrunk to five. Chinese firms already outsell Japanese ones in the developing world.

Western firms still enjoy some advantages. They have a decades-long head start building global brands and hiring local staff who understand what consumers in their markets want. China's geopolitical ambitions, meanwhile, sometimes cause commercial problems. Its territorial claims in the South China Sea have soured relations with some of its South-East Asian neighbours. China is also unpopular in countries that received big investments through the Belt and Road Initiative but have struggled to service the associated debt, such as Sri Lanka and Zambia.

It is early, then, in the contest for the consumers of the global south. But Western firms may have less time than they think before Chinese rivals gain the upper hand. Protectionist politics at home will not save them abroad. ■



Britain



Energy policy

Transition of power

What will Great British Energy do?

WHEN SIR KEIR STARMER proposed a state-owned company called Great British Energy in September 2022, he was aping the man dragged out of 10 Downing St two months earlier. Sir Keir had studied Boris Johnson's bracing pledge to "take back control" in the 2016 Brexit referendum. Adapting this mantra, the then opposition leader griped that the only governments with a stake in Britain's energy system were foreign ones, from Sweden, France and China. GB Energy would secure "British power for British people". It would also allow him to ditch a more radical plan for wholesale renationalisation.

Now that Labour is in government, the question is whether good politics can become good policy. Sir Keir has long been breezy about what exactly a new "national champion" for energy would do. In a speech on July 25th at a wind-turbine factory in Widnes, he gave more clues. The plan still comes wrapped in misty-eyed pa-

triotism; some of it raises eyebrows. But at its core is a sensible urge to use the power of the state to speed private development.

Energy is central to Labour's plan for government. Of its five organising missions, the most developed is to have a clean power system by 2030, five years earlier than the previous government's target. Sir Keir and his eager energy secretary, Ed Miliband, have swiftly announced a series of green projects, including wind turbines,

solar farms and electricity pylons. This, they argue, is the only way to reduce bills, emissions and the country's exposure to oil and gas imports. Ministers see cutting the cost of electricity as vital to growth.

As elsewhere, Labour's approach combines deregulation with enthusiasm for an active state. Within days of taking office, Mr Miliband lifted a de facto ban on on-shore wind in England and approved three solar farms that had been gummed up in the planning system. He has promised to remove local vetoes on green infrastructure; on July 30th he announced a big increase in the budget for the next renewable-energy auction. Yet these measures alone, says Mr Miliband, won't be enough for the pace and scale of change that is needed. That is where GB Energy comes in.

Take offshore wind. Labour wants to almost quadruple capacity in six years, from around 15 gigawatts (GW) today to 55GW by 2030. The current development process is painfully slow. Ground conditions are mapped, seabird flocks assessed, communities consulted, grid connections secured: add that up and there is typically a decade between getting a seabed lease and breaking ground, says Alistair McGirr of SSE, a renewables firm. Things have got slower the more congested the seabed has become; a neighbouring project can easily mess with your study of a kittiwake colony. ▶▶

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17 Another Tory leadership race

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▶ Tackling this speed problem will be GB Energy's first big job. Although planning reforms will help a bit, ministers worry that projects may still get gummed up in legal challenges. Instead, they see a new role for the state in carrying out area-wide environmental assessments and facilitating compensation measures for local communities. In the case of offshore wind GB Energy will partner with the Crown Estate, a public body, to take on this early development work; sites that have been made ready will then be sold on to private firms. The Netherlands uses a similar model; private developers think emulating it is sensible.

What else might GB Energy do? So far it is not entirely clear. The government will establish it as a state-owned company based in Scotland. Its board—which will be chaired by Jürgen Maier, a former boss of Siemens UK, a manufacturing business—will be independent, meaning that Mr Miliband will not be able to interfere with investment decisions. He will set the company's budget and objectives, however. Over the current five-year parliament it will get £8.3bn (\$10.7bn, or 0.3% of GDP), although Labour has not said how this will be allocated. Its mission is set to include not only getting turbines built faster but creating jobs, earning money for taxpayers and lowering energy bills.

Three risks stand out. The first is that GB Energy focuses on the wrong aims. Unblocking private development is where GB Energy can add most value, says Sam Alvis, an energy wonk who worked on the body's design; if it succeeds, bills should fall over time as more renewables come onto the grid. But lowering bills doesn't make much sense as a near-term goal, given they will be driven more by oil and gas prices. And asking it to make money for the Treasury could be self-defeating. If Labour wants to speed up development the bigger challenge is to make projects more financially attractive to private firms, says Brett Christophers of Uppsala University.

A second related risk is whether GB Energy ends up crowding out investment rather than crowding it in. Some suspect it might hold onto stakes in offshore wind farms that it has taken through the early stages of development, when these could easily attract private money. "The question is 'why should the state want to buy a wind farm?'" says Huub Den Rooijen, formerly of the Crown Estate. A better use of a relatively modest budget would be to de-risk areas that the private sector is less willing to invest in, says Josh Buckland of Flint Global, a consultancy. That might involve looking at the barriers to less mature technologies—constructing the right infrastructure at ports to support floating offshore wind platforms, for example.

The third risk is that GB Energy gets too ambitious. Mr Miliband, who has long cast

a jealous eye over other state-backed energy firms like Denmark's Orsted and Sweden's Vattenfall, hopes that GB Energy will eventually become a fully fledged generator, building and running its own projects. Yet those other companies took years to build up their expertise and they did so in a nascent market. It is probably "ten years too late" to start competing with them, reckons Mr Den Rooijen. What might be more realistic is building up deep expertise as an equity partner.

Flanked by factory workers in Widnes, Sir Keir framed his fledgling creation as a decisive break in British energy policy: "It is time for the British people to own things and make things again." That language suggests something more radical than the likely reality. Labour still plans to achieve the energy transition through the market. The test of GB Energy's success will be how much it hastens that process, not whether it creates an alternative one. ■

Online disinformation

A tragedy and a riot

The Southport attack and its aftermath

IT WAS AN ugly moment in a traumatic week. Sir Keir Starmer had come to visit the site of a horrific knife attack that had taken place on July 29th in Southport in which three children had been killed and ten others injured. By the time the prime minister arrived in the seaside town in north-west England the next day, conspiracy theories had been swirling online for hours. An angry mob heckled him as he lay



The overwhelming reaction

flowers. "Get the truth out," one yelled.

Things would get uglier still. By 8pm on July 30th dozens of thugs had gathered around a local mosque. They hurled bricks at Muslims who had come to pray and at the police who had come to protect them. A police van was set alight; 27 officers had to be taken to hospital. Overwhelmingly, the local community had only wanted to grieve in peace. "This is the only thing I will write, but please stop the violence," said Jenni Stancombe, whose daughter had been killed in the attack.

Rabbles on streets are nothing new. But the violence in Southport—and further disturbances in London, Hartlepool and elsewhere on July 31st—show that the way hooligans congregate has changed. The rioting was sparked by false claims on social media that the attacker was called "Ali Al-Shakati" and had arrived in Britain on an illegal boat. (The police have said that the man charged with the attack, who is 17 and cannot be named, was in fact born in Cardiff to Rwandan parents.) "Six hours of misinformation on Monday fuelled a riot outside a mosque on Tuesday," says Sunder Katwala of British Future, a think-tank.

The spread of lies has been made easier by social-media platforms tilting back towards permissiveness, after earlier efforts to clamp down on incitement and hate speech. Tommy Robinson, a far-right English activist, is one of many who have been allowed back onto platforms like X. Other sites like Facebook have cut their monitoring teams, says Nick Lowles of Hope Not Hate, a campaign group. Among those to have spread false rumours about the identity of the attacker is Andrew Tate, a misogynistic social-media personality with a large online following.

The riot was also an illustration of how the far right has changed in the past decade in response to a declining electoral market for overt racism. "There has been a turn away from the ballot box and towards the street and online," says Mr Katwala. Agitators like Laurence Fox, a former actor, argue that multiculturalism has failed; at a rally in London on July 27th he told a large crowd that there was "no political solution to this problem". A proliferation of football-hooligan and other groups on WhatsApp and Telegram, two messaging apps, has made it simpler to organise trouble, as happened after pro-Palestinian marches about the war in Gaza and seems to have happened again in Southport.

Mr Lowles, who tracks far-right activity in Britain, thinks that most of the rioters in Southport came from the town and those around it. Their cause may only attract a few hundred supporters in each area; locals were out the next morning in Southport to help clear up the mess. But the jobs are still numerous enough to cause trouble, and they will be back again. ■

Fiscal feuding

It wasn't me

Rachel Reeves sets out her first big decisions as chancellor

THE FIRST months of a new British government are precious. Problems can be blamed on ministers' predecessors, who will struggle for a hearing. Capitalising on that honeymoon can neutralise the political costs of tough choices: George Osborne, a former Conservative chancellor, moved quickly in 2010 to pin swingeing spending cuts on Labour's profligacy. Britain's new Labour chancellor is following the same playbook. On July 29th Rachel Reeves presented the results of an audit into the public finances, which she had commissioned straight after the election.

With the stern look of a disappointed head teacher, Ms Reeves decried an "unforgivable" inheritance. Her focus was on immediate pressures in this financial year. Even after accounting for the Treasury's rainy-day fund and assumptions that some programmes would come in under budget, she told Parliament that a £21.9bn (\$28.2bn; 0.8% of GDP) overspend had been uncovered. About half came from inflation-busting pay rises for public-sector workers. Most of the rest came from £6.4bn in higher-than-expected costs associated with the asylum system, with smaller contributions from aid for Ukraine, support for the railways and more.

Ms Reeves expects to fill a quarter of that hole with immediate spending cuts. The single biggest saving will come from means-testing winter-fuel payments for pensioners. That saves £1.5bn in the next fiscal year and the group affected—the better-off elderly—is hardly a core Labour constituency. Further savings will come from axing chunks of Rishi Sunak's policy legacy. She is ending schemes to send asylum-seekers to Rwanda (worth £1.4bn), to revamp the secondary-school curriculum (£185m) and to sell discounted shares in NatWest to the public (£100m-450m).

More consequential were her cuts on social care (worth £1.1bn) and transport (£785m). The transport cuts are mostly focused on second-tier road and rail projects. Nonetheless, they represent a continuation of previous governments' tendency to endlessly tinker with infrastructure projects. Ms Reeves condemned "the stop-go cycle of capital investment" in a lecture in March. Back then she called it "the new British disease". Strikingly, the cuts did not extend to the government's new flagship initiatives to spend billions in public money on green infrastructure.

If Ms Reeves's goal was to re-emphasise Labour's sorry inheritance, she was partly successful. Labour and the Conservatives have been shadowboxing over the state of the public finances since before the election. The Conservatives argue that forecasts from the Office for Budget Responsibility (OBR), a fiscal watchdog, mean the books are now fully open.

But the OBR's medium-term forecasts, last released in March, did not account for in-year overspends. A row is now brewing over whether it was misleading for the Treasury not to share details of the areas at risk; Richard Hughes, the OBR chief, has announced an investigation. Jeremy Hunt, the last chancellor, parried with a letter querying why top civil servants had just signed off on this year's spending if the overruns were so unusual. Ms Reeves has set out reforms that should make future cases of this sort much easier to spot.

Focusing on the overall fiscal inheritance also helps Labour to divert attention from the policy choices embedded in Ms Reeves's statement, such as accepting the recommendations of pay-review boards to raise public-sector wages by more than expected. Doing so is understandable: pay has lagged the private sector since inflation started rising in 2022. But it was still a choice. Also consequential is confirmation that Labour will axe Conservative plans to cap civil-service headcount.

Her statement set the stage for the next budget, which will take place on October 30th. Labour was evasive on tax throughout the election, saying it would not raise taxes on "working people" and ruling out increases to the biggest levies. Ms Reeves has since confirmed the inevitable: that some tax rises are coming. But she will be hoping that her show of fiscal sternness will be enough to reduce their political impact—for Labour, at least. ■



And finger-pointing

Railways

A fatter controller

A former champion of rail privatisation is lurching the opposite way

WHEN BRITAIN'S railways were nationalised for the first time, in 1948, politicians steamed. Conservative peers called it "a most ghastly mistake" and "by far the biggest measure of Socialism which had ever been proposed in the world outside Russia". By contrast, the new government's renationalisation programme is chugging along quietly. A bill to bring passenger-train operations into public ownership passed its second reading in the House of Commons on July 29th, following a thinly attended debate. Polls show that most people, including most Conservative voters, approve.

This smooth passage is a surprise, because if you take a long view, Britain is doing something extraordinary. In the 1990s a Conservative government dismembered British Rail, which had run the railways since nationalisation, and embarked on a radical programme of privatisation. Once the new government has finished its work, Britain will end up with one of the rich world's most centrally controlled railways. That may not leave it better off.

The government's plans are in two parts, and will take two bills to achieve. First comes the renationalisation of passenger services. At present most intercity trains are run by firms that contract with the Department for Transport. As their contracts expire or reach break points, the department will not renew them. All the services should be in public hands by October 2027. A second bill will create Great British Railways, a powerful quango that will oversee train operations, railway infrastructure and much else.

If this does not seem like a lurch, it is partly because of what has happened in the past few years. Since 2018 the Department for Transport has taken over four railway franchises from companies that ran into trouble. Most of the remaining private train operators are firmly under the state's thumb. They used to have considerable freedom to innovate and set ticket prices, but lost it when the state bailed them out during the covid-19 pandemic. "Effectively, the railway is already nationalised," says Andy Bagnall, the head of Rail Partners, which represents train operators.

Another reason for the smooth journey to central control is that almost nobody likes the current arrangements. Poor co-ordination between private train operators, Network Rail (which looks after the infra- ➤

structure) and other parts of the system wrecked the transition to a new timetable in 2018. Innovations like digital signalling, which ought to allow more trains to run on a line, are far harder than they should be. Andrew Haines, Network Rail's boss, recently called the introduction of digital signalling on one short stretch of track "as close to impossible as anything I've ever encountered in my life".

Even so, Britain is travelling in an unusual direction. Under pressure from the EU, other European countries are allowing more room for private operators. Long-distance trains in France remain a virtual state monopoly, but in May the regulator approved a deal that will allow a private company to compete. The firm's name, Kevin Speed, evokes the Porsche-driving, wide-tied chancers who appeared in Britain in the era of privatisation and deregulation.

Britons probably like the idea of renationalisation because they believe it will improve performance. If it creates a more integrated railway, with better co-ordination between infrastructure and train operation, they might be proved right. But running a railway is not easy, as the previous government showed over the course of recent years. The Office of Rail and Road, a regulator, tracks the performance of 24 passenger-railway operators. Over the year to March 2024, three of the franchises run by the Department for Transport were among the top five with the most cancellations (if you include services removed from the schedule in advance, not just on the day they were due to run).

Nor has the state managed to respond intelligently to the railways' greatest problem: the huge changes in travel patterns since the pandemic. Railway journeys are still one-tenth lower than in 2019 despite the popularity of the new Elizabeth Line in south-east England. As office drones have taken to working from home, season-ticket sales have collapsed by two-thirds. In 2021 the government tried to lure people back by introducing a new flexible season ticket, but sales have been slow.

Other troubles lie ahead. The calamity of HS2, an endlessly overrunning infrastructure project, means less money for other initiatives and perhaps less confidence that Britain is capable of transforming its railways. A few hours before the railway nationalisation bill passed its second reading in the Commons, the chancellor, Rachel Reeves, nixed a scheme that might have brought some old railway lines back into use. Meanwhile, metropolitan mayors such as Andy Burnham in Greater Manchester and Sadiq Khan in London are demanding more control over railway services in their territories. Renationalisation and the creation of Great British Railways might only end up providing travelling Britons with new targets for their anger. ■

Health care

Short-termitis

The disease that most afflicts the NHS

ON JULY 29TH the new Labour government announced a pay deal with the British Medical Association that would give junior doctors in England a pay rise of 22% over two years. If accepted it will bring an end to the longest period of industrial unrest in the history of the National Health Service (NHS), which has led to the cancellation of almost 1.5m appointments.

The rationale, said Rachel Reeves, the chancellor, was simple. Settling the strikes will cost £350m (\$450m), which is "a drop in the ocean" compared with the £1.7bn they have cost the taxpayer. Paying more may make sense for workforce reasons, too. In a health-care system that struggles to retain its staff, the agreement may stop some doctors from fleeing to Australia. But in other respects, the government seems less keen to take the longer view.

Short-termism is built into the NHS's annual planning cycle. In order to stick to its budget, the NHS routinely relies on its trusts and Integrated Care Boards (ICBs), regional bodies that plan and commission services, to sign up to unrealistic targets. At a point in the year when the finances get particularly dicey—usually because of winter ailments, though last year because of strikes—the government somehow finds extra money. Even so, the combined deficit for ICBs was still estimated to be £1.4bn in the 2023-24 fiscal year.

These pressures now look set to worsen. The government this week accepted the recommendation of pay-review bodies to give public-sector workers, including those in the NHS, a raise of 5.5%. To help fill the hole left by these increases and other overspending, trusts will have to find more

efficiency savings.

The result is likely to be yet more raids on NHS capital budgets, a practice that has already caused huge trouble. Britain spends far less on capital investments in health care than comparable countries. The NHS reckons that the cost of the maintenance backlog on its estates—already rising (see chart)—will exceed £15bn by 2028. Crumbling buildings are not just dangerous. They add to delays and inefficiencies. In one hospital, an intensive-care unit was recently closed because the roof fell in. In another, staff must wheel their patients outside between buildings.

Capital spending is being squeezed in other ways, too. A hospital-rebuilding programme worth £20bn was beset by delays in part because the last government allocated as little money as possible to the early phases; Labour now says it will review the whole programme. Measures designed to incentivise fiscal discipline can have perverse outcomes. Guy's and St Thomas' Foundation Trust in London has one of the largest estimated maintenance backlogs, at more than £400m. Because its ICB produced a deficit, even though the trust had a small surplus, its capital allocation has been reduced by £2m this year.

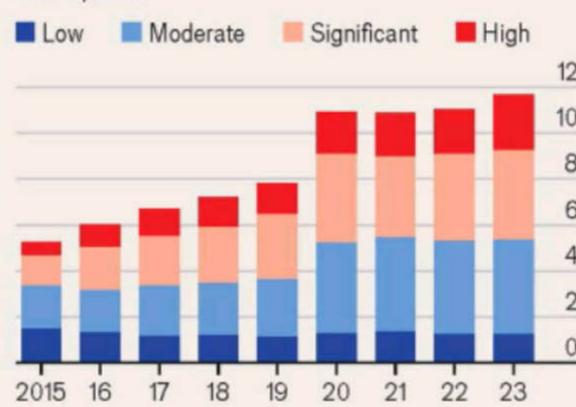
These are not the only symptoms of short-termism. Successive governments have dodged the costs of shifting the health-care system more towards prevention. There were 6.7m diagnoses of major illnesses in England in 2019; the Health Foundation, a think-tank, reckons there will be 9.3m by 2030. Wes Streeting, Labour's health secretary, has long recognised that Britain should be spending less on hospitals and more on keeping populations healthier for longer. But Labour's main manifesto pledge for the NHS was to ensure that within five years no one waited more than 18 weeks on hospital waiting lists, which now top 7.6m. Prioritising that measure means hurling more resources at hospitals, not fewer.

Cost-cutting has meant yet another delay to a planned overhaul of social care, where continued underfunding ratchets up pressure on the NHS. On July 29th Ms Reeves also cancelled a long-planned reform that would have capped the costs people pay for social care. Doing so will save £1.1bn in the first year but come at a steep cost to thousands of families. Sir Andrew Dilnot, an economist who first proposed the cap many years ago, has called the decision "a tragedy".

In a recent report on the NHS's finances, the National Audit Office warned of the "potential growing mismatch between demand for NHS services and the funding the NHS will receive". On his first day in office, Mr Streeting said that the service was "broken". Ridding it of short-termitis would be a good course of treatment. ■

Repair job

Britain, NHS maintenance backlog, by risk*, £bn
2023 prices



Sources: NAO;
The Economist

*Measured by likelihood and consequences of failure



Politics

Tory story

The race to become leader of Britain's Conservatives

KEMI BADENOCH has a reputation for pugnacity, which is why many Tories think she should succeed Rishi Sunak as the party's leader. But when addressing Angela Rayner, Labour's new deputy prime minister, in the House of Commons on July 19th Ms Badenoch sounded jaded. Ms Rayner's hope of peppering up housing construction was doomed, she said. There would be a deluge of angry emails; Labour's new MPs would revolt.

"We have been there. We know; you don't," she told Labour. "I want to reassure the right honourable lady that I will be here to say, 'I told you so' when these targets are missed." It was a strikingly defeatist account of the power of government—as John F. Kennedy didn't say: "We choose not to go to the Moon, or do the other things, because they are hard."

A sense of exhaustion runs through the Tory party, which has embarked upon the search for its sixth leader in a decade. By the deadline on July 29th Ms Badenoch and five of her fellow MPs had gathered the requisite ten nominations by their parliamentary colleagues to enter the contest to succeed Mr Sunak. They will be whittled down to four candidates by other Tory MPs, and then down to two after the Tory party conference in October. The party membership will then pick the winner, who will be announced on November 2nd.

It seems clear that candidates will pitch to the right in pursuit of members' support. Ms Badenoch, analysing why her party se-

cured its worst result since the birth of Britain's modern electoral system in 1832, argues that it "talked right yet governed left". Robert Jenrick, another contender, says that voters "did not feel that the Conservative Party was conservative enough for them." Tom Tugendhat, ostensibly a liberal-minded Tory, has put exit from the European Convention on Human Rights on the table. James Cleverley and Priti Patel promise more sway for party members.

That tactic might win a leadership race. It is less likely to propel the Tories back to power, for three reasons. First, voters may conclude that this sounds like the same record that Mr Sunak played, at increasing volume, during the election campaign. Recall how his opening pitch in that contest was a pledge to bring back national service, a tougher line on trans rights and new restrictions on immigration.

The messengers are familiar, too. Mr Tugendhat and Ms Badenoch ran for the leadership in 2022. Mr Cleverley and Ms Patel are former home secretaries, Mr Jenrick an ex-immigration minister and Mel Stride, the final member of the sextet, a former work and pensions secretary. The last three leaders to take their parties from opposition to government—Sir Keir Starmer, David Cameron and Sir Tony Blair—only entered Parliament in the election following their party's ousting from office.

The second problem is that the Tories lost voters in every direction. In the election on July 4th they retained just 52% of

Boris Johnson's electoral coalition of 2019, as it splintered between Labour (which won over 13% of the Tories' 2019 voters), the Liberal Democrats (7%) and Reform UK (23%). A "unite the right" strategy, in which the Tories claw back defectors to Reform UK, is one-eyed. So far the candidates have had bizarrely little to say about the fact that the Lib Dems have punched deep into the Tories' wealthy English heartlands. The ambition to win back Labour voters is entirely absent. The notion that the Tories' richest pickings lie to the right is probably mistaken anyway: 26% of Reform voters say they will "never" vote Tory again, compared with 14% of Lib Dems, according to More in Common, a think-tank.

The third problem with tacking right is the risk of irrelevance. For the next five years the Labour government will set the agenda; voters will give opposition parties a second glance infrequently, and punish those that seem divorced from their concerns. In 2006 Lord Cameron told his party it had absented itself from the national conversation: "While parents worried about child care, getting the kids to school, balancing work and family life, we were banging on about Europe." Such hardheadedness is absent now.

Successful oppositions must decide which bits of their own past to disown, and which parts of the political landscape to accept as the new consensus. Sir Tony had to embrace the market logic of Thatcherism, Lord Cameron the social liberalism of New Labour. Here the Tories face two big decisions. First is what story they tell about Britain's economic performance. The official line from the party, for the moment, is that Mr Sunak bequeathed Labour a recovering economy of strong growth, low inflation and low unemployment, and that tax rises introduced by the new government are an ideological choice. The decision for the next leader is whether to continue that defence or to face harder truths about persistent low growth since 2008.

The second is over planning reform. Sir Keir is putting the need to build at the centre of his economic agenda. Under Mr Sunak, who will continue as leader until his successor is chosen, the Tory response so far has been to redouble the base-pleasing NIMBY rhetoric of the election campaign, talking of an attempt to "concrete over the green belt". Many think it essential that the Tories change their tune if they are to reclaim the banner of wealth creation.

Taking his first Prime Minister's Questions on July 24th, Sir Keir mocked Sir Roger Gale, a veteran Tory, who griped about his building spree. "My advice is that when you get rejected that profoundly by the electorate, it is best not to go back to them and tell them that they were wrong. It is best to reflect, and change your approach and your party." Sound advice. ■

BAGEHOT

Voters care less about tax than politicians think

So if you're going to increase a tax, make it a big one



THE CORNISH pasty looms large in David Cameron's memoirs. In 2012 the then Conservative government decided to levy VAT on hot takeaway food such as the beefy snack. It was a measly scheme that would have raised an annual £110m (\$140m; 0.005% of GDP). Outrage ensued. "Pasties," Lord Cameron despaired. "I hadn't even thought about pasties." For page after page, he gaily recalls the scandal which saw headlines of "Let Them Eat Cold Pasty" and a Marie Antoinette lookalike hounding George Osborne, his chancellor of the exchequer.

In comparison, Lord Cameron's memoir spends precisely one paragraph on the biggest tax rise of his tenure. In 2010 his government raised £13bn a year by increasing VAT by 2.5 percentage points to 20%, its highest level ever. It was a huge rise, yet attracted little opprobrium at the time and is now largely forgotten.

Tax policy leads to peculiar politics. Outrage bears no relation to fiscal impact. The biggest increases often receive the least blowback; small ones can trigger fury. Voters are rarely grateful for a cut; often they barely notice. Rachel Reeves, the new chancellor, finally admitted on July 30th that taxes will have to increase when she presents her first budget in the autumn. The bizarre politics of tax will come to the fore once more.

In general voters pay far less attention to tax than politicians think, whatever direction it moves. Consider the last Tory government. Jeremy Hunt, the then chancellor, was generous to the point of irresponsibility, knocking 4p off the rate of national insurance at a cost of £20bn per year. Taken together, the tax cuts saved a typical earner £900. Yet about eight in ten said the cuts would make little or no difference to their personal finances. They did nothing to stop the Conservatives receiving a historic beating in the general election on July 4th.

Tax rises are swallowed far more easily than people in Westminster expect. Between 2019 and 2024 the Tory government raised taxes more than any parliament since the second world war. Freezing income-tax thresholds resulted in huge increases; middle-class earners on far from extravagant wages were dragged into higher-rate bands for the first time as nominal salaries shot up. In 2010 one in ten people paid Britain's 40% rate; now one in six does.

By 2028 freezing thresholds will bring in £40bn per year—as much as raising the basic rate of income tax by 5p per pound.

Describe this scenario to an MP in 2019 and they would have predicted civil unrest. Instead, British voters grumbled in focus groups but largely accepted it. Some may not even have noticed. Only six in ten people check their payslips; few of those will bother to untangle how much extra the taxman took—particularly if more money is landing in their bank account overall. On the eve of the election 1% of voters thought tax was the most important issue facing Britain. Only 5% thought it was among the most important; in contrast, one in three voters opted for the National Health Service. Raising the money is one thing; what the government does with it is more significant.

How the tax is collected often matters more than how much is taken. Taxes that people pay directly are much less popular. Council tax is hated. Sending a direct debit of £200 a month to the council is more visible than the much larger sums whipped directly from people's salaries by the government. In general, voters would prefer a cut to council tax (which makes up a small chunk of household costs) over one to income tax (which would leave them materially better off), according to More In Common, a pollster. Inheritance tax is loathed. Only 4% of estates pay it, but many more people resent the idea of it. Writing a cheque to the government shortly after a relative has died is no fun.

Sage commentators often quote Jean-Baptiste Colbert, a 17th-century French statesman: "The art of taxation consists in so plucking the goose as to obtain the largest amount of feathers with the least possible amount of hissing." In practice this strategy often results in few feathers being plucked and an angry bird, as Lord Cameron found with pasties. It is better to follow the strategy of Lord Cameron's VAT rise: grab the goose, ignore any hissing, and hope it eventually forgives or forgets. Voters often do. Ken Clarke, one of the more successful chancellors, put it best: "There is nothing so dead and forgotten as old budgets." What was controversial one day becomes the norm the next.

On October 30th Ms Reeves will have the pleasure of announcing her first soon-to-be-forgotten budget. When it comes to raising money, she has limited her options. The chancellor has ruled out an increase to VAT, income tax, national insurance and corporation tax. Together they account for about 70% of all government revenue. Rather than pulling one lever as far as it can go, Ms Reeves has to yank as many as possible to raise proper money.

Tax doesn't have to be taxing

The more levers Ms Reeves yanks, the higher the chance that she will experience what Lord Cameron faced with the Cornish pasty. Perhaps it will be farmers, dragged into inheritance tax for the first time. Maybe doctors, who now have a taste for striking, will not like their pensions being pilfered. Grumpy businessmen whacked by capital-gains tax may prove a formidable lobby group. Better to pick a larger tax—whether national insurance or VAT—and make any outrage worth it. If a revolt is possible over a pasty, it is possible over a pension.

What of the pasty? Following the outcry, Lord Cameron's government allowed a loophole. If a warm pasty was cooling down, having been recently removed from an oven, it would remain exempt. The Cornish pasty defeated Britain's mighty Treasury. It was a loss the Treasury could bear. After all, Lord Cameron's VAT rise remains in place. It is worth about £20bn per year. Tasty. ■

Europe



The EU migration pact

The quest for a fair deal

EL HIERRO

Europe's new laws try to limit irregular migration, help states and protect refugees

THEY MOVE stiffly on weak legs as they leave the bus and enter the fenced-off temporary centre on El Hierro, one of the Canary Islands. Spanish police register each one, reading the number off a wristband they were given at the port, calling out: "U8, adult female! U3, minor male!" Then come the men, who make up the vast majority: of the 145 arrivals on that day's boat, eight are women and three children. Nearly all are sub-Saharan Africans.

They are lucky. No one is seriously ill; no one has given birth at sea, as someone the week before had; and they all survived. This year more than 5,000 migrants have died trying to reach Spain, mostly en route from western Africa to the Canaries, according to Caminando Fronteras, an NGO. Meanwhile, around 20,000 people made it alive in the first half of 2024. That makes

the western African route a growing share of the total; EU-wide arrivals were around 94,000, down about a third from last year.

The boats sail directly west from Africa (usually from Mauritania, these days) to evade capture by African coastal forces. That lengthens their journey. When they point back towards Europe, the nearest island is the smallest and westernmost of

the Canaries, with only 7,000 residents.

El Hierro has responded admirably. After a couple of days, the migrants moved to a disused convent which they could leave freely. Many unaccompanied minors are housed with families, and join local schools. The head of the island's government, Alpidio Armas, says the situation creates little controversy. The Canaries have long experience of immigration, especially from Latin America. The islands are ageing, and agriculture, tourism and construction need labour; Mr Armas would like more of the migrants to stay.

But most of the adults are swiftly sent to much bigger Tenerife. From there, many will move to the Spanish mainland, where they are far less welcome. Vox, a hard-right party, quit several regional coalition governments in July over plans to distribute asylum-seekers around the country.

The boats arriving in places like the Canaries and Lampedusa, in Italy, are only the most striking form of illegal migration to the European Union. In fact most arrivals come by air (entering legally and overstaying visas) or over land. Ever since the crisis years of 2015-16, when over a million irregular migrants arrived, the EU has struggled to find a collective response.

Now it finally has one. In May the bloc approved a "migration pact" of ten laws. Margaritis Schinas, a vice-president of the European Commission who helped craft the pact, says it proves that Europe can "lead from the centre". He jokes that he was "encouraged" that both right-wingers (Matteo Salvini of Italy) and leftists (Jean-Luc Mélenchon of France) opposed it.

The deal takes effect in June 2026. It will massively beef up the data system for fingerprinting and registering migrants, known as Eurodac. The idea is to track repeat arrivals and stop people from going elsewhere in the EU (already prohibited in theory, but often ignored by arrival states).

Another innovation is a legal fiction that those arriving have not yet entered the EU. This allows for the "border procedure", a keystone of the deal. Migrants judged to pose a security risk, or who come from a relatively safe country (one from which less than 20% of previous migrants received asylum), can be sent home in an expedited procedure. Countries like Senegal and Mauritania, poor but not at war, fall into this group. Critics say the border procedure will not be a legal proceeding worth the name. Since the right to seek asylum is part of international law, this provision will probably face legal challenges.

In 2022 around half of irregular arrivals were granted some form of protection in Europe. Those from countries whose nationals typically succeed, such as Mali

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▶ (68%) or Sudan (70%), will still have access to the full, lengthy asylum procedure, including appeals. So will unaccompanied children and the mentally ill. Harmonising asylum criteria across the EU's 27 members is meant to even out success rates. (Currently, in the EU as a whole 62% of Afghans get asylum; in Romania only 28% do.)

Finally, a "solidarity mechanism" will allow border countries to relocate an EU-wide total of 30,000 or more asylum-seekers per year to other countries, according to quotas. Countries that refuse to take their share may instead pay €20,000 (\$21,700) per head—a grubby bargain to appease countries that ignored an earlier quota. But states can declare a migration "crisis" and suspend some of their burden-sharing responsibilities (though the EU institutions must subsequently agree). This may be abused by countries such as Hungary that oppose the migration pact.

The pact will not work without diplomacy. Europeans have already made deals to restrain migration with transit states such as Egypt, Libya, Mauritania, Morocco, Tunisia and Turkey. These sometimes lead to outrages: in May a group of newspapers and Lighthouse Reports, a journalism collective, reported that black migrants in Mauritania, Tunisia and Morocco were being rounded up and dumped in the desert, using vehicles donated by the EU. But such "externalisation" of border enforcement seems likely to continue. This year Italy struck a deal with Albania to use Albania as a kind of offshore processing centre for asylum claims.

The hardest part may be making deals with the countries migrants originally hail from. EU countries want them to stop migrants from leaving, and have struck deals with some of them. But the new "border procedure" assumes they will take back their nationals. They often refuse, and there is no way to force them.

A previous boat "crisis" from west Africa to the Canaries in 2006 shows what might be possible. Spain struck deals with

a number of countries of origin, working with local security forces, boosting development aid and allowing more legal migration. Bernardino León, Spain's deputy foreign minister at the time, says that countries do not want to do Europeans' work for them: "You need to help them sell something to their people."

The new migration pact will require an extraordinary number of institutions to work together. National governments need co-ordinated approaches to migration involving interior, foreign, labour, social-security, overseas-development and other ministries. The EU's 27 governments must get along as best they can. And countries of origin and transit need to be brought on board. Europe at last has something resembling a collective migration system. Now it has to make it work. ■

Vienna's social housing

Paradise cost

VIENNA

Beloved by progressives, the housing system in Austria's capital has its flaws

WITH THE mercury hitting 35°C this summer, many Viennese have headed for rooftop pools. At Aspern Seestadt, one of Europe's largest housing projects, they can plunge into an artificial lake or take the kayak out for a paddle. Such are the joys of the projects, Viennese-style. Aquatics for the many, not the few.

About 60% of Vienna's population of 2m or so live in "social housing", where rents are kept low by the city. Apartments are often small, but the amenities—kindergartens, laundries and pools—generous. A two-bedroom unit of 80 square metres (861 square feet) with a garden costs as little as €900 (\$975) a month. Vienna is regularly voted the world's most liveable city: cheap housing means more money for the good life. Just 44% of Viennese spend over a quarter of their income on housing (including energy costs); in London it is 86%, in Paris 67%. Renters can keep their apartments for life at roughly the same rent.

This housing model is a legacy of "Red Vienna", a period after the first world war when a socialist city council started building proletarian fortresses such as the gigantic Karl-Marx-Hof. It has recently been attracting enormous interest from abroad. Doves of American city planners grappling with homelessness and soaring rents have come over to learn whether the Viennese model can work in places like San Diego. The *New York Times* has lauded Vienna as a "renters' utopia".

That all depends on who is renting.

True, young people can ditch their parents in their early 20s. But even many Viennese acknowledge that the model is no longer fit for purpose in a fast-growing, prosperous city. Designed to provide housing for the poorest, Vienna's social housing now mostly benefits the well-off.

The council owns and runs about 220,000 apartments directly, including old-fashioned *Gemeindebauten* (community flats) such as the Karl-Marx-Hof. Most of the action, however, centres on 58 "limited-profit housing associations" (LPHAs), which account for some 20% of the city's housing. A national housing tax of 1% divided equally between employers and employees helps these schemes. The council reduces the LPHAs' costs, for example by letting them buy land at knock-down rates.

About 80% of Vienna's population qualify for social housing, so high are the income limits: €57,600 after tax for one person and over €100,000 for a couple with two children. The council boasts that this makes it "inclusive": the entire middle class gets access to subsidised housing. But the barriers to entry are such that it is mostly the middle class that benefits.

For a start, people can enter the housing queue (sometimes two years long or more) only if they are citizens of an EU country and have been registered for two years at the same address in Vienna. Applicants also have to demonstrate a regular income. These criteria knock out many immigrants, new arrivals and those without regular jobs. Non-Austrians make up 34% of Vienna's population and Austria has very low naturalisation rates.

Moreover, rent is not the only cost for an LPHA apartment. Prospective renters must make a down payment of up to €500 per square metre to meet building costs. So-called "smart apartments" charge much less, but are often tiny, just 40 square metres. The council argues that such fees "protect the system from being overrun"; critics say they simply keep immigrants and the poor out of middle-class enclaves. Only 9% of renters in the LPHA sector have low incomes. Since residents can stick around for life, the council has struggled to prevent tenants with houses elsewhere from renting out their municipal flats.

Ironically, the poorest quarter of Vienna's residents often have to rent in the private sector. There, rents are needlessly high, argues Hans Ulreich, a property developer. Private builders must follow the same dense bureaucratic procedures as the municipal housing sector. Mr Ulreich thinks regulations could be significantly reduced without losing safety or quality. Vienna's population is growing by 20,000 per year, and social housing alone cannot meet the demand. The Viennese model was groundbreaking in the 1920s, but it is no panacea—and is due for an update. ■

Route cause

European Union, irregular border crossings, '000
By route, January-June 2024



Odessa's beaches

Come in, the water's demined

ODESSA

Ukraine's seaside resort is tanning again

THREATS OF missiles, drones and mines might ordinarily put holidaymakers off their buckets and spades. But nothing is so simple in Odessa, Ukraine's resort on the Black Sea. Two and a half years into war, its beaches are alive again with speedos and grandmothers selling corn on the cob. Trains and hotels are sold out weeks in advance. Prices for the most expensive rooms have shot up to \$1,000 a day.

Observing the bronzing bodies from behind his easel is Valentin Zakharchenko, a 74-year-old artist. He is not so interested in the sea—that is merely the background to his portrait of a young man sunbathing. He is much more interested in watching the seemingly relaxed people. "Don't be fooled," he says. "The state of war is present in everyone's soul right now."

Fazil Askerov, a hotelier at Nemo, a five-star resort, acknowledges the oddity of sunbathers just a few hundred metres from Odessa's heavily bombed port infrastructure. The city's tourism chiefs reckon this year's season is three times busier than in 2023. Ukraine's ban on military-age males leaving the country has left few holiday alternatives, Mr Askerov says. Creative real-estate agents have taken to marketing apartment rentals by saying they are on the "non-drone-facing" side of town. Nonetheless,

all of Nemo's glass-fronted penthouses on the vulnerable seafront are booked.

The authorities began clearing mines from city beaches as early as April. But that does not mean they are entirely safe, says Captain Dmytro Pletenchuk, a spokesman for the navy. Russian missiles often miss their targets, and storms wash mines towards the shore. Encounter one in the water, and "you're a goner. The probability is low, but it's real."

The tourists largely ignore the war. Few head to air-raid shelters during alerts. Not every beach has shelters close enough to run to within the three minutes of warning before a ballistic missile lands. Sasha, a taxi driver, says people worry more about drones, though Russia has not sent many in the past two months. But that is no reason for complacency, thinks Sasha: "My guess is that they are modernising drone stocks with jet engines." Idle speculation? Not necessarily. With a smile, Sasha produces a military pass: he is a serving air-defence officer. Driving a cab is a side job.

Back in his cluttered studio, Mr Zakharchenko says his painting might be an allegory of the city's future. He is not sure how it will turn out. He marks a line across the sky above the young sunbather. "See, the line could be a crane, flying lyrically, beautifully," he muses. "Or it might be something quite different."



Cannonball

The Paris Olympics

Ungoverned yet glorious

PARIS

The Olympics shine despite France's political deadlock

THE OLYMPIC games are doing something very odd to France. Traditionally, the country has embraced jaded critique as a national character trait. Now the hosts of the games, who on July 31st ranked second in the medal table, seem to be shrugging off their studied glumness and reaching for superlatives as if for a bottle of chilled summer rosé. Léon Marchand, the swimming champion, has become "*une nouvelle star*". After the spectacular opening ceremony along the Seine on July 26th *Le Monde*, the bible of the understated Paris intellectual, went full tabloid: "MAGIC!"

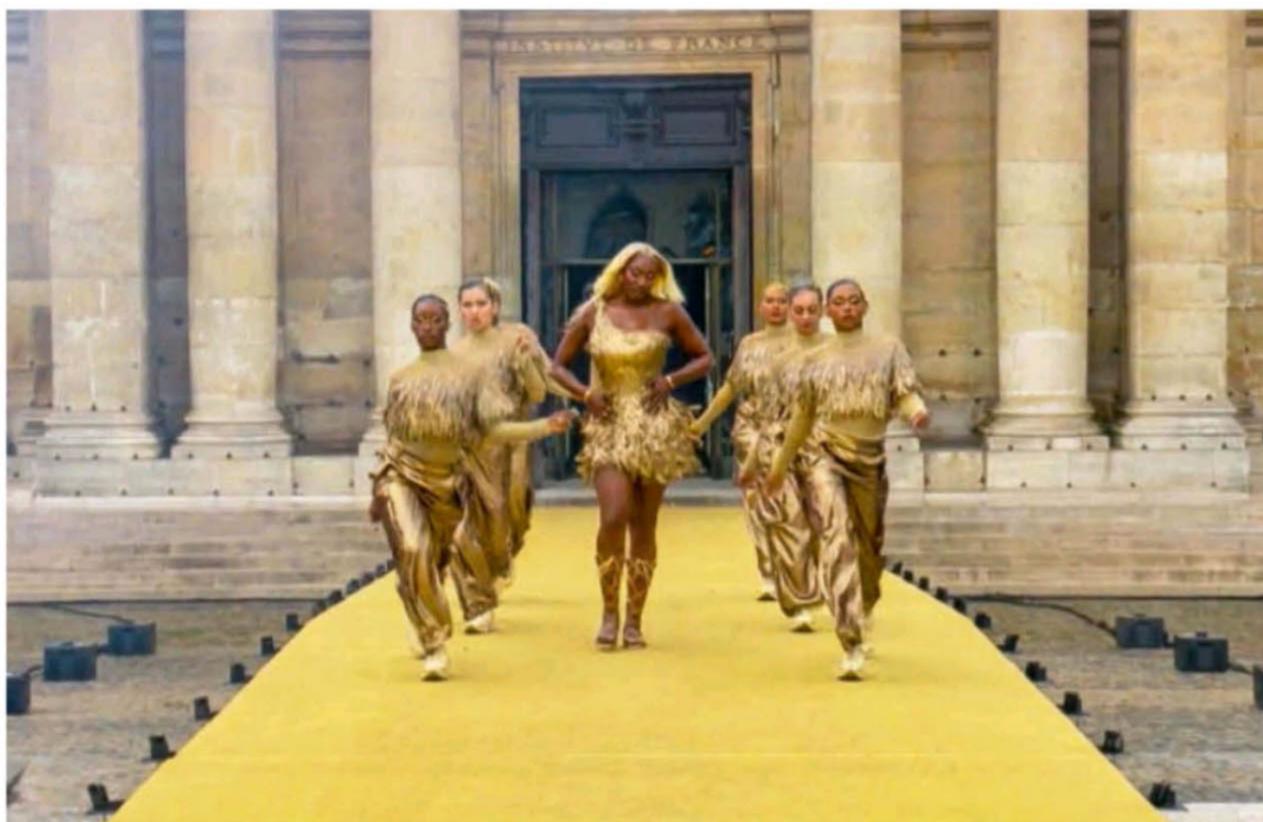
This unsettling positivity is not just a capital-city phenomenon. Three-quarters of the French now say they are pleased that the country is hosting the games. As many as 23m people watched the opening ceremony on French television. Fully 86% judged it to be a success. This figure is all the more telling given the way the four-hour extravaganza challenged France's traditional conception of itself.

A playful, boisterous carnival, the festival along the Seine played with the themes of order and rebellion, formality and disruption, against the backdrop of Paris's quays and palaces. As darkness fell, and despite heavy rain, the river became a mirror for a whimsically defiant mobile spectacle overseen by Thomas Jolly, a theatre director. Aya Nakamura, a Franco-Malian singer (pictured on next page), dressed head-to-toe in shimmering gold, performed with swaying musicians from the Republican Guard. Dancers attached to poles swung above the 16th-century Pont Neuf. President Emmanuel Macron, profiting from the enthusiasm, posted a widely-shared sentiment on X: "This is France!"

Even a controversy that emerged on the religious right was swiftly washed away. After a burlesque scene featuring drag queens on a bridge, Marion Maréchal, a politician from the ultra-Catholic right, denounced a "parody of the Last Supper". The claim went viral. Church leaders joined in. This was absurd, Mr Jolly explained: the scene was a tribute to a painting of Dionysus, god of wine and festivities. The Olympic organisers apologised for any offence, and the French moved on.

Natives say the city feels different. The metro's signage has improved. Policemen dispense friendly advice in place of the traditional Parisian snub (or worse).

Even the fact that France has no proper



Nakamura goes for gold

▶ government seems to have been forgotten. Until the games began, political life had become an unimpressive spectacle of fractious squabbling. This was exacerbated by Mr Macron's decision to call snap parliamentary elections, which ended inconclusively on July 7th with a hung parliament. No political bloc is remotely close to commanding a majority; no majority alliance is close to being forged. Since July 16th Gabriel Attal has acted as a caretaker prime minister, and is likely to do so at least until the end of the games, on August 11th.

The left-wing New Popular Front (NFP), now the biggest bloc, with 193 seats in the 577-seat lower house, thinks it has a solution. After weeks of quarrelling, the alliance of Socialists, Greens, Communists and the hard left finally agreed on a candidate for prime minister: Lucie Castets, the little-known finance director of Paris's city government, which forecasts that its debt will rise from €7.7bn (\$8.3bn) in 2022 to €9.3bn in 2025. Ms Castets has since been doing the media rounds. She promises to lower the pension age and raise €150bn in new taxes by 2027, largely from the rich.

Yet Mr Macron looks in no rush to offer her the job. The constitution states simply that the president names the prime minister; only political precedent suggests that the job should go to the biggest party. Mr Macron still hopes, says an aide, that rival parties will find their way to a majority coalition. This would appear to rule out inviting the NFP, which is 96 seats short of a majority, to govern alone. Yet if his own centrist bloc, which holds 166 seats, were to form a coalition, it would need to join up with both the centre-right Republicans, who hold 47, and the moderate left. Neither link looks imminent.

When the games are over, divisive politics in Paris will doubtless resume. The

budget for 2025 is due to go to cabinet in late September, and then to parliament the following month. The longer Mr Macron takes to name a prime minister, the more the left-wing alliance will cry foul and accuse him of meddling in the democratic process. But, for the time being at least, rudderless France has put politics on hold, and seems all the better for it. ■

Armenia and the EU

Tacking west

YEREVAN

Armenia is turning towards Europe but fears alienating Russia

THE EUROPEAN UNION boasts of being a regulatory superpower, not a military one. But in its relationship with Armenia it is starting to deploy both sorts of muscle. On July 22nd the EU announced that one of its military-assistance programmes will send aid to Armenia for the first time. The same day it opened visa-liberalisation talks. Meanwhile, American troops were conducting a small exercise with Armenian forces. It was all part of the pivot to the West begun last year by Nikol Pashinyan, the prime minister.

Armenians are disillusioned with their erstwhile patron, Russia. Distracted by its war in Ukraine, it failed in 2023 to stop Azerbaijan from conquering Nagorno-Karabakh, formerly an autonomous ethnically Armenian enclave. Both America and European powers are eager to weaken Russia in its traditional backyard. "Much of the population of Armenia wants to get further from Russia. So we're creating the

conditions for that to happen," said James O'Brien, America's assistant secretary of state for Europe, on July 30th. But it is a difficult manoeuvre, and Mr Pashinyan is buffeted by winds from multiple directions.

In the Caucasus, Russia is down but not out. Mr Pashinyan has frozen military co-operation and evicted Russian border guards who were stationed at Yerevan's airport. But Russia still has a base and thousands of soldiers in Armenia, and its border guards still patrol Armenia's frontiers with Turkey and Iran. Russia owns Armenia's railways and fuels its nuclear power plant. It probably still enjoys the sympathy of many in the security forces.

The Russian response to Armenia's westward turn has ranged from concern trolling (Maria Zakharova, a foreign-ministry spokeswoman, expressed "concern for Armenia's future") to veiled threats. Dmitry Peskov, a Kremlin spokesman, said Armenia was free to pursue relations with other partners but not "the way the Kyiv regime did it, that is, in an 'either-or' fashion".

Meanwhile, Mr Pashinyan is negotiating with Azerbaijan to resolve their decades-long conflict. Azerbaijan is using the threat of fighting to strong-arm Armenia into concessions, including removing territorial claims on Nagorno-Karabakh from its constitution. At home Mr Pashinyan faces an emboldened opposition, led by a charismatic nationalist archbishop, that is enraged by such compromises.

If the Kremlin wants trouble for Armenia, Azerbaijan will be happy to help. On July 26th it claimed that Armenia had fired heavy weapons across the border, blaming America, the EU and France for encouraging "provocations". With Western military aid, Armenia is "less motivated to stay engaged in the peace process", says Elchin Amirbayov, a senior Azerbaijani official.

Western help has so far been modest. The EU's military aid amounts to €10m (\$10.8m), partly earmarked for preparing Armenian forces to take part in future EU missions. The joint drills with American forces were based on a peacekeeping scenario, not combat. If the visa-liberalisation talks eventually bear fruit, it will be years from now. None of this helps with Armenia's immediate needs. "The West most probably will not give hard security guarantees to Armenia, and I believe everyone understands this—Russia, the West, Pashinyan and Azerbaijan," says Benyamin Poghosyan of APRI Armenia, a think-tank.

The extent of the pivot to the West remains unclear. It will probably depend on the outcome of the war in Ukraine and on whether Russia's relations with the West remain bitter. In the meantime, Mr Poghosyan says, Mr Pashinyan is trying to be "anti-Russian enough to get something from the West and not anti-Russian enough to burn all the bridges with the Kremlin". ■

United States



Infrastructure

Death by a thousand slides

BIG SUR, MOSS LANDING AND SAN SIMEON

California's Highway 1 is showing the limits of mankind's ingenuity

BOB VAN WAGENEN is cruising 2,000 feet above the rocky shoreline of California's central coast at 180mph. The fog retreats westward from the cliffs and settles over the Pacific, allowing his four-seat Cessna Skylane a clear view of the bluffs below. He trades his aviator shades for spectacles to better read his instruments, and to look for blue whales in the azure waters. Two things stand out: the drama of the mountains meeting the sea, and the two-lane highway between them. "It's terribly remote down here," he says into his headset, the plane whirring in the background. "This is Highway 1 in all its glory."

Highway 1 is the westernmost road in California. Only a guardrail and a steady hand prevent drivers from careening into the ocean. Construction began in 1919, but the 656-mile (1,060km) route, which begins south of Los Angeles and ends in tiny Leggett, where redwood trees outnumber people, wasn't finished until 1937. Built with

prison labour, at least 70,000 pounds of dynamite and financing from Franklin Roosevelt's Public Works Administration, it was one of many engineering marvels erected during the Depression.

Lately, however, the highway has not been traversable from beginning to end. Since January 2023, a Highway 1 road-trip must be done in two pieces.

Tourists can cruise north along Orange County's beaches, where the road emerges from a tangle of highways resembling spa-

ghetti. It swerves inland in Los Angeles, before jutting back towards the coast. Up near San Simeon road-trippers can smell the elephant seals before they come into view. The seals burp and bark and squirm in piles on the sand mere feet from Highway 1. Slightly farther north, the signs begin. "Slide area". "Road closed ahead".

The scenery is different at the other end. After traversing Leggett's forests and the north coast's craggy beaches, Highway 1 streaks across San Francisco's Golden Gate Bridge. Sea otters play in the estuaries around the highway in Moss Landing. Humpback whales swim unseen in the submarine canyon offshore. South of Monterey, the signs resume. "Rock slide ahead".

Big Sur, a rugged 70-mile stretch of the coast over which Mr Van Wagenen is flying, is the highway's missing middle. Fierce winter storms in the past two years pummeled the Santa Lucia mountains, loosening mounds of sediment which buried and broke the road in four places (see map on next page). Highway 1 is the only artery that connects Big Sur to the rest of California—and it was clogged.

Fog crawls up Big Sur's western slopes, which are green in the winter months and gold in the summer. The redwoods cast long shadows above the poison oak. Without a reliable phone signal, locals navigate by waypoints. They speak about the land

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stronger atmospheric rivers. These conveyor belts for water in the sky now carry up to half of California's average annual rainfall. A recent paper from a trio of researchers at the University of California in Los Angeles (UCLA) suggests that the most extreme atmospheric rivers may bring 25% more precipitation in future. When these filaments move east across the Pacific, the first landmass they hit are the coastal mountains, like those above Highway 1.

Climate change is also increasing the intensity and range of fires across California. Wildfires followed by more intense rainfall increase the risk of landslides. Flames can incinerate vegetation, destabilising soil and rock. When plants burn in extremely hot fires, a waxy, water-repellent substance can form on the soil. "It's almost like putting a plastic tarp down on the ground in terms of letting all of that water run off," explains Daniel Swain, a climate scientist at UCLA.

The state's transport agency, Caltrans, reckons the highway will open in full this year. But there is no plan to alter the road to avoid problems recurring. Some propose grand solutions: tunnel through the mountains, or move the highway inland. John Laird, a state senator for Big Sur, is dismissive. "I get asked, 'Why don't you just reroute the highway?'" he says, with some exasperation. "Sorry, have you been there? Have you seen it? When you have that situation, there is no rerouting."

Locals believe that the highway is too precious to fail. They are probably right, but the price is high. Caltrans estimates that the four landslides of 2023-24 alone will cost \$128m to fix. California is rich, but not exactly flush with cash. For the past two years the governor, Gavin Newsom, has slashed spending on climate initiatives to plug a budget deficit.

There are only whispers about the other option: managed retreat. Big Sur will not be swallowed by the Pacific, but repeatedly being cut off from civilisation threatens the health and livelihoods of locals. Not fixing the road is "relegating those folks to not living there anymore", says Mr Swain.

Sitting in the corner of his library, with his cat, Jack Kerouac, mewing at his feet, Mr Toren ponders the wisdom of development in Big Sur—and its uncertain future. The highway brought us into this landscape, he says, with gratitude and remorse. But "if I were to deeply consider what would be best, then...we should all just leave Big Sur to be wild." ■

 [View interactive](#)

To see the full version of this story, including an interactive map, extra photos and video footage of the landscape and landslides, go to: economist.com/highway1

Campaign calculus

The Kamala effect

The latest polls point to a dramatic tightening of the presidential race

JOE BIDEN had been one of the most unpopular presidents to seek re-election since the advent of modern polling. In April 2023, when he declared his intention to run for a second term, some 41% of Americans said they approved of him. More than a year later, after his disastrous debate performance and calls from high-profile members of his own party for him to step aside, his approval rating sank to an all-time low of 37%.

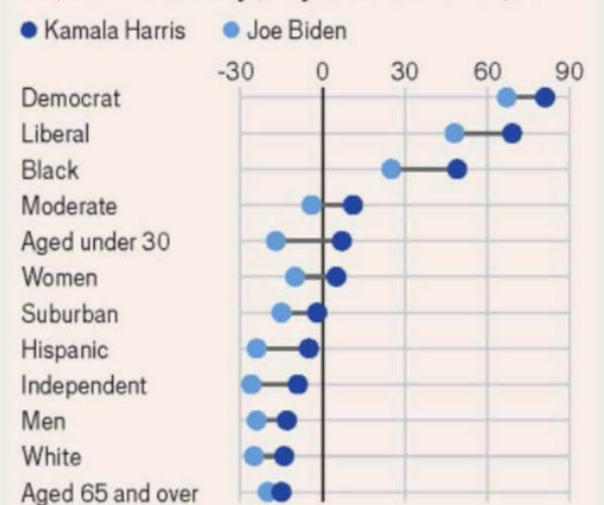
But throughout the intervening period polls showed that the Democratic Party was weathering the storm despite its standard-bearer taking on water. When given a choice between Mr Trump and an unnamed Democratic candidate, rather than Mr Biden, Democrats enjoyed a clear lead. Who was this mysterious Democrat who could both excite the party's base and work to woo moderate and undecided voters? It seems that the answer may have been hiding in plain sight: Kamala Harris, who became the presumptive nominee in the days after Mr Biden stepped aside.

Although polling is still sparse, early results suggest that the Democratic base is very enthusiastic about their new candidate. YouGov, a pollster, found that before Mr Biden's withdrawal 62% of Democrats said they were enthusiastic about voting in November. After he dropped out, that share rose to 79%. Favourability towards Ms Harris is a lot higher than for Mr Biden, especially among those who are young, black or Hispanic (see chart), voters whose support had been faltering this year, according to many polls.

In an average of national polls Ms Har- ▶▶

A new phenominee

US, net favourability*, July 27th-30th 2024, %



Source: YouGov/The Economist *Favourable minus unfavourable

▶ as a place eternal. "This is the California that men dreamed of years ago," wrote Henry Miller, one of many writers and artists who sought solace in Big Sur. From the air, it looks untouched but for the highway. "It is like a giant has come down this coast with a huge sword and just cut the landscape," says Magnus Toren, who runs the Henry Miller Memorial Library.

The highway has always been unstable because of the region's geology. For more than 100m years the ocean's crust plunged beneath the land that would become California. Bits of the sea floor were scraped up as if by a snow plough. "There's a whole pile of junk at the front edge of the continent," explains Tanya Atwater, a geophysicist. Then, about 25m years ago, the collision of two tectonic plates pushed that "junk" skyward to form the Santa Lucia range. The mountains are crumbly and inconsistent: some material weaker than the rock right beside it.

Stuck in the middle with you

Because the mountains are relatively young, they are still growing. But they are also eroding and Mr Van Wagenen's flights help track that. When he hits a button, a camera starts clicking, taking one picture every second. Scientists at the US Geological Survey stitch them into one image to compare the coast over time and catch landslides before they have catastrophic consequences. They can spot slow-moving ones. But the irregularity of the rock makes forecasting future debris flows impossible.

Some of Big Sur's 1,500 inhabitants welcome a break from tourists. But the respite comes with big problems. First responders can't get to residents in an emergency. Children must hike to their school bus. Helicopters drop food. Hotels and restaurants suffer. The state also loses. Visit California, its tourism agency, reckons that a 2017 slide deprived the state of at least \$581m in tourism revenues and taxes.

Climate change will make things worse. As the oceans warm, more moisture is carried in the atmosphere, which can create

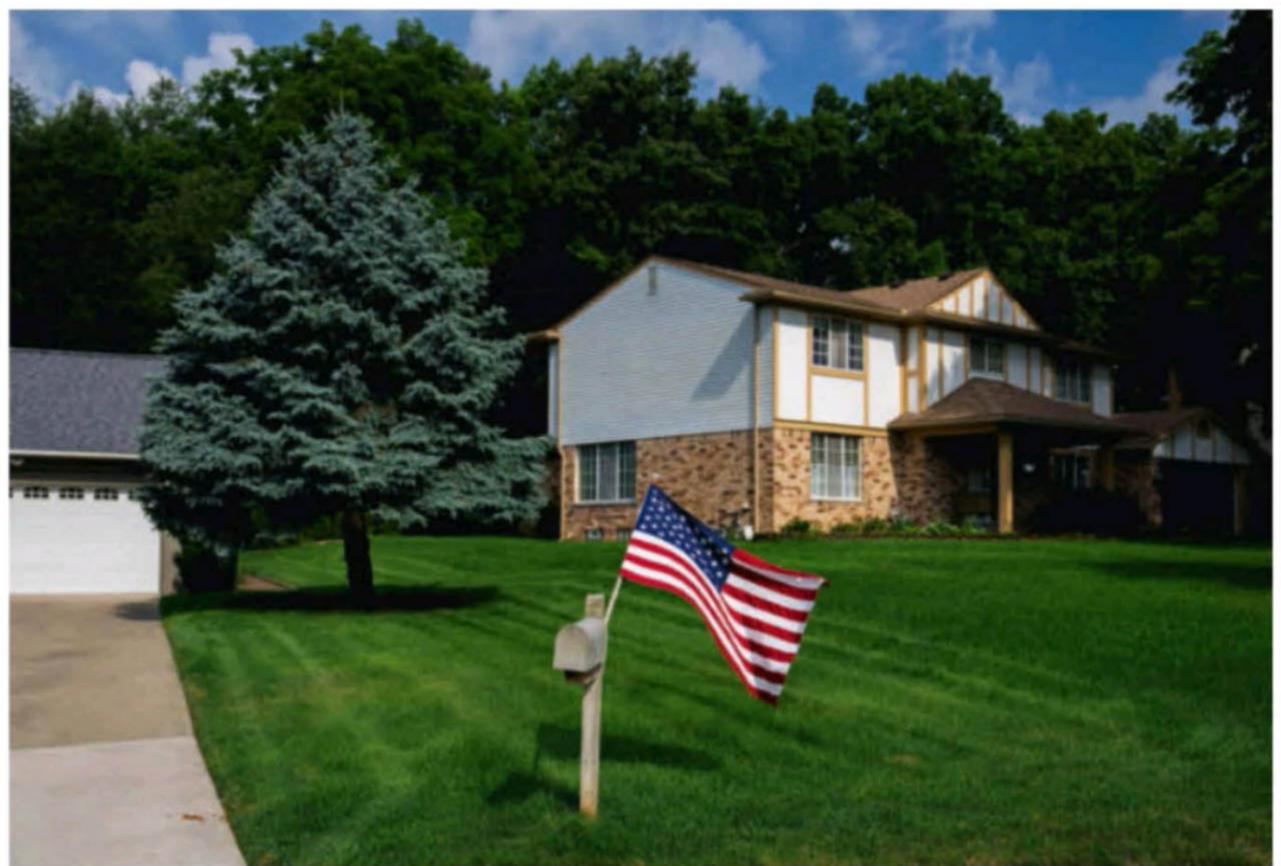
ris still lags behind Mr Trump, though by a smaller margin than Mr Biden did (one point versus three points). Mr Trump led in the ten national polls conducted the week before Mr Biden stepped down from the nomination. In the 27 polls since then, Ms Harris has led in 12 and tied in one. Whereas third parties tended to hurt Mr Biden more than Mr Trump, early polling since Ms Harris took the helm indicates that the opposite might now be true. In recent polling conducted by YouGov, 3% of voters who supported Mr Biden in 2020 said they would vote for a third party rather than Ms Harris or Mr Trump. This compares with 9% in the equivalent poll carried out before Mr Biden's withdrawal, suggesting that some Biden-sceptic third-party voters might be coming home to the Democrats.

But Ms Harris's entry into the race has done more than invigorate the core of the Democratic base. Her favourability ratings are an improvement on Mr Biden's among moderates and older voters, too. Among those who say they are unsure who they will vote for in November or that they are open to changing their minds, Mr Trump has a net favourability of minus 38, compared with minus 30 for Mr Biden and minus 13 for Ms Harris. Ms Harris has improved on the erstwhile presumptive Democratic nominee's net favourability with independents by 17 points.

Citing poor polling for Mr Biden, the Trump campaign has insisted that states which Mr Biden won by large margins in 2020, such as Minnesota and Virginia, are within the former president's grasp. But recent state polling suggests that Ms Harris has narrowed the contest back to the key swing states. The averages of three recent polls in Minnesota and two in New Hampshire show her leading by around six points in both states, barely behind Mr Biden's margins of victory in 2020 and well ahead of polls conducted before his withdrawal.

Meanwhile, she has closed the gap with Mr Trump in the states which are likely to be pivotal in the electoral college. Across six polls, she was tied with Mr Trump in Michigan and trailed him by one point in Pennsylvania, states where Mr Biden was trailing by two points and four points at the time he dropped out, according to FiveThirtyEight, an aggregation website.

None of this suggests that Ms Harris is odds-on to win the presidency. Nationwide, the election is very close. To defeat Mr Trump, she must overcome a big electoral-college disadvantage. Early approval from voters may wither as her opponent hones his attacks. Still, Ms Harris has succeeded in upending some of the peculiarities of the rematch between Messrs Trump and Biden, reinvigorating the Democratic base. She has moved the contest back to familiar battlegrounds. Now, there are fewer than 100 days to win it. ■



Swing states: Michigan

A kinder, gentler Trumpism

ROCHESTER HILLS

Can Donald Trump win back suburban voters?

ON A HOT and muggy evening in Rochester Hills, a suburb of Detroit, the local Republican club is meeting to hone battle plans for the 2024 election. Leading the workshop is Amy Hawkins, an energetic millennial activist and supporter of Donald Trump. She tells the crowd of mostly 60-somethings that the Republican Party needs an attitude adjustment. Don't shun those who disagree with you, she urges; instead, recognise that "we don't all have to sing from the same songbook." Don't show up in MAGA hats to yell at local school-board officials, she implores; do bake them cookies and tell them you're praying for them. "What if we became known as the happy party?" she muses.

It is easy to see why Ms Hawkins has chosen to recalibrate Trumpism in this enclave of stately homes occupied by voters with college degrees. When Mr Trump won the White House in 2016, he took Michigan by a mere 11,000 votes. He lost the state's white, college-educated suburban voters by five points. In 2020 that deficit swelled to 17 points and he lost Michigan to Joe Biden by 154,000 votes. Suburbanites' rebuke of Mr Trump accounted for three-quarters of the swing against him. To win this year, Mr Trump will need to lure at least some of them back.

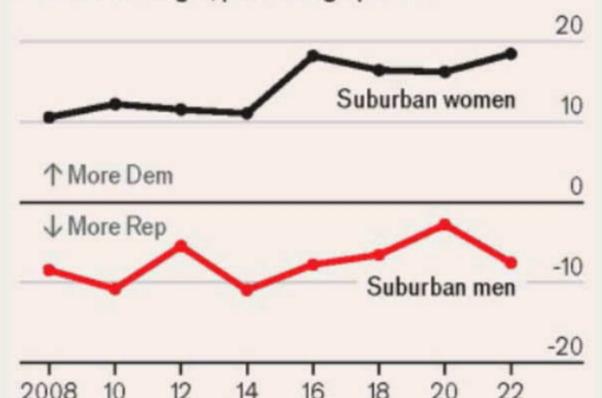
He has work to do. According to polls from YouGov/*The Economist*, Mr Trump is polling nationally at 43% among white

suburban voters with a college degree. That is three points less than the share he won in 2020, judging by numbers from Catalyst, a progressive political-data firm. How, then, did Mr Trump build a steady lead over Mr Biden this summer? Among educated white suburbanites, at least, it is not so much that Mr Trump is winning; it is that Mr Biden was losing, and the question now is whether a new Democratic nominee can reverse that trend. In 2020 the president won 53% of white, college-educated suburban voters nationally. Across June and July 2024 Mr Biden polled at 43%.

Now that Democrats are to replace him with a younger candidate, will the picture

Great Lake status

Michigan, Democratic vote margin relative to state average*, percentage points



*Presidential and gubernatorial elections
Sources: Catalyst; Michigan Department of State

change? There is clear evidence that Kamala Harris, the presumptive nominee, would have an opportunity to improve on Mr Biden's recent performance. In 2022 Michigan's popular governor, Gretchen Whitmer, won re-election by an 11-point margin. She swept the state's suburbs by 17 points. Although there are no apples-to-apples figures available about Mr Biden's standing in Michigan when he left the race, it is clear from national numbers that his margin was much smaller than that. Ms Harris could close the gap.

This summer, particularly after Mr Biden's cataclysmic debate performance on June 27th and until he ended his campaign on July 21st, Mr Trump has maintained a steady lead in national polls and in every swing state. Yet as the ceiling on his vote-share shows, Mr Trump remains vulnerable in the suburbs. A Democratic comeback would probably pass through swing-state suburban counties like Oakland.

A tale of two counties

Rochester Hills may appear as if it belongs in a 1960s John Updike novel, but the suburbs are not what they used to be. For one, they are racially more diverse. Since 1980, the number of white residents in Oakland County has held steady but that of non-whites has grown from 60,000 to 320,000 in 2020. The county has shifted left during this period; greater diversity is probably one factor, along with changing views among college-educated white voters.

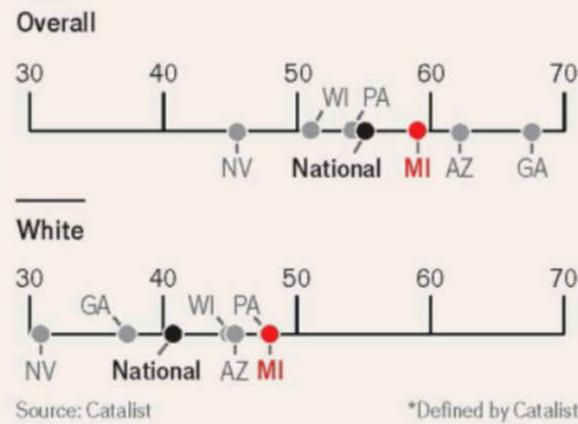
Polarisation along educational lines has also changed how suburbanites vote. Consider Michigan's tale of two suburban bellwether counties. Between 1972 and 2012, Oakland, where half of adults have college degrees, and its working-class neighbour, Macomb County, where a quarter do, were regarded as lockstep predictors of Michigan's vote in presidential elections.

Oakland voted for the candidate that won the state ten out of 11 times, while Macomb did so nine times. The average difference in candidate margins across the two counties was just four points. But Mr Trump changed all that. In 2016, Oakland and Macomb diverged by 20 points and Mr Trump won Macomb with 54% of the vote. (Hillary Clinton prevailed in Oakland.)

Since then, Republicans have found themselves on shaky ground in Michigan. Their state party fell into disarray, riven by internecine struggles and swamped with debt. And they would surely prefer to forget the past three elections in the state. In 2018 Republicans "got slaughtered in Michigan", says Jason Cabel Roe, a veteran party strategist in the state. Ms Whitmer won the governor's contest, and Democrat women won races for attorney-general and secretary of state. Two more women Democrats, Haley Stevens and Elissa Slotkin, won competitive congressional seats,

Suburban bliss

United States, share of total votes cast by suburban voters*, 2020, %



marking the first time since the 1930s that Oakland County had no Republican representatives in the House. "It was very much the year of the woman," Mr Roe adds.

It got worse for Republicans in 2022. As Ms Whitmer won her second term easily, a ballot initiative to enshrine abortion in the state's constitution passed by 13 points. Democrats took control of the state House and Senate, and established their first trifecta in 38 years, controlling the governorship and both chambers of the legislature.

With abortion rights in the state already established, that issue—a rallying point

for Ms Harris's campaign—has less salience in Michigan. Suburbanites are most concerned about the economy this time around, according to polling from Emerson College. Generally, Mr Trump polled better than Mr Biden on that issue. Yet so far, there has been little enthusiasm for this election. In the summer of 2020 polling from YouGov/*The Economist* showed that some 70% of white, college-educated suburban voters were extremely or very enthusiastic about that year's election. Across June 2024 only about half said the same. In an initial poll after Mr Biden left the race, enthusiasm among Democrats rose to 54%, compared with 43% in a previous poll.

Ms Hawkins's pitch in Rochester Hills for a kinder, gentler Trumpism reflects recent attempts by the national Republican Party to tone down MAGA pugilism. The effort was on display at the party convention in Milwaukee. It is not a natural script for Mr Trump and he did not stick to it for long, but some of his allies on the front lines understand what it takes to win in blue-leaning areas. "The formula is to trim yourself a little bit on the rhetoric and the issues that you talk about," Mr Roe says. The "guiding principle is to give non-Republicans permission to vote for a Republican." Even one carrying the baggage of Donald Trump. ■

National defence strategy

Red alert

America is not ready for a major war, warns a bipartisan commission

GENERAL CHARLES "CQ" BROWN, the chairman of the joint chiefs of staff, America's top military officer, recently told the Aspen Security Forum, a gathering of the country's foreign-policy elite, that the nation's armed forces were the "most lethal, most respected combat force in the world". Steely-faced, and to jubilant whoops, he declared: "I do not play for second place."

In truth, America's military position is eroding. That is the message of a report published on July 29th by a bipartisan commission entrusted by Congress with scrutinising the Biden administration's National Defence Strategy, a document published two years ago.

The commission was chaired by Jane Harman, a former Democratic congresswoman, with Eric Edelman, an undersecretary of defence in the George W. Bush administration, deputising. In 2018 the previous such commission had warned that America "might struggle to win, or per-

haps lose, a war against China or Russia". This time the language is starker. The threats to America, including "the potential for near-term major war", are the most serious since 1945, the commission says. The country is both unaware of their extent and unprepared to meet them.

The most serious problem is China. "We're at least checkmating China now," boasted Joe Biden, America's president, on July 6th. In reality, China is "outpacing" America not only in the size but also in the "capability" of its military forces, as well as in defence production, and the country is probably on track to meet its target of being able to invade Taiwan by 2027, argues the commission. In space and in the cyber realm, the People's Liberation Army is "peer- or near-peer level".

Russia is a lesser concern but, despite its quagmire in Ukraine, still poses a serious threat. On July 19th Vipin Narang, a senior Pentagon official, confirmed reports that Russia was seeking to place a nuclear



A not-so-super power

▶ weapon in orbit, describing it as a “threat to all of humanity” and “catastrophic for the entire world”. The report says that America should boost its presence in Europe to a full armoured corps, a much larger commitment than currently exists, accompanied by enablers such as air defence and aviation, with some of today’s rotational forces, which swap in and out, potentially turned into ones that are permanently deployed.

Compounding these threats is the increasing political and military alignment between China, Russia, North Korea and Iran, including the transfer of arms, technology and battlefield lessons. That presents “a real risk, if not likelihood”, in the sombre view of the commission, “that conflict anywhere could become a multi-theatre or global war”.

In 2018 the Trump administration’s National Defence Strategy did away with the previous requirement that the Pentagon be prepared to fight two major wars, including one in Europe and one in Asia, at the same time. Mr Biden’s team stuck to that reduced ambition. The result is that a war in one theatre would stretch America dangerously thin, forcing it to rely on nuclear weapons to compensate.

A conflict would also find America wanting in other respects. “Major war would affect the life of every American in ways we can only begin to imagine,” warns the commission. Cyber-attacks would pound critical infrastructure including power, water and transport. Access to minerals vital for both civilian and military industries “would be completely cut off”, the report concludes.

Casualties would far exceed any Western experience in recent memory. The latest simulations by the army show that, in

battles involving corps and divisions—larger formations that the army is prioritising over brigades and battalions—casualties ran to 50,000-55,000, including 10,000-15,000 killed. The commission does not call for a return to the military draft, which America abandoned in 1973, but it hints at it, saying that the country’s all-volunteer force faces “serious questions”.

Military solutions

In response to these problems, the commission makes a number of recommendations. One is to bolster alliances. On July 28th the Biden administration made a big stride in that regard by announcing the creation of a new “warfighting” headquarter

ters in Japan to command all land, sea and air forces in the country. Another recommendation is to reform the Pentagon, whose procurement, research and development practices the commission describes as “byzantine”.

A third is to sharply raise defence spending, which is projected to remain flat in real terms for the next five years, despite the previous commission’s recommendation for 3-5% annual real-terms growth. That particular figure is somewhat arbitrary. Nonetheless, the commission urges Congress to revoke existing spending caps, pass a multi-year supplemental budget to beef up the defence-industrial base and open the fiscal taps to put defence “on a glide path to support efforts commensurate with the US national effort seen during the Cold War”.

There is something here to irritate everyone. To pay for all this, the report proposes additional taxes and cuts to spending on health care and welfare. Both political parties will balk at that. Democrats shy away from more defence spending. Republicans are allergic to more taxes. The defence-policy wonks in Donald Trump’s orbit will like the idea of beefing up the armed forces, but many will recoil at the idea of putting more troops into Europe, rather than Asia.

There is little time to waste, says the commission. “The US public are largely unaware of the dangers the United States faces or the costs...required to adequately prepare,” it says. “They do not appreciate the strength of China and its partnerships or the ramifications to daily life if a conflict were to erupt...They have not internalised the costs of the United States losing its position as a world superpower.” ■

The Supreme Court

POTUS and SCOTUS

NEW YORK

A second Trump administration could lock in a conservative supermajority for decades

IN A SPEECH in Texas on July 29th President Joe Biden called for major changes to America’s highest court: term limits for the justices and an enforceable ethics code, plus a constitutional amendment scuttling the court’s recent decision broadly shielding former presidents from criminal prosecution. Kamala Harris, his vice-president and would-be successor, quickly endorsed the proposals. But Mike Johnson, the Republican speaker of the House of Representatives, accurately declared the plans “dead on arrival”. Republicans are disinclined to tinker with a Supreme Court

delivering conservative victories. And the requisites for constitutional amendments—supermajorities of the states and in both houses of Congress—remain hopelessly out of reach.

Still, by highlighting the “dangerous and extreme decisions” emanating from the Supreme Court, Mr Biden is turning voters’ attention to a potent issue. Reforms may be unrealistic for now. But the shape of the court may turn on who sits in the Oval Office come January.

Over his four terms Franklin Roosevelt managed to appoint a full complement of ▶▶



All the presidents' picks

▶ nine justices. Dwight Eisenhower, in two terms, seated five. If Donald Trump retakes the White House he could join a small club of presidents who pull off the legacy-shaping accomplishment of installing a majority of sitting justices.

Mr Trump has already left a deep imprint on the court. Each of his three appointees—Neil Gorsuch, Brett Kavanaugh and Amy Coney Barrett—shifted it further to the right. Justice Barrett's nomination to succeed Ruth Bader Ginsburg anchored a six-justice majority that has brought sweeping changes to American law, from guns to religious liberty to abortion.

If the Republicans recapture the presidency and also win back the Senate, in a second term Mr Trump could fill vacancies without undue difficulty. With the demise of the filibuster rule for Supreme Court nominees in 2017, little would stand in his way should another seat or two open up.

Who might go? The two oldest justices—Samuel Alito, 74, and Clarence Thomas, 76—would surely stay should Mr Trump lose in November, to keep the court conservative. But they could be ready to retire if he wins. They have attracted scrutiny for accepting gifts from billionaires and for their spouses' sympathy with the "stop the steal" movement that culminated in the attack on the Capitol on January 6th 2021. These appointees of George W. Bush and George H.W. Bush (respectively), not Mr Trump's trio of justices, are the most MAGA of the lot. Installing two justices in their 40s or early 50s could solidify the Supreme Court's conservative tilt for decades.

When he ran for president in 2016 Mr Trump released a list of potential nominees vetted by the Federalist Society, the seat of the conservative legal movement. Yet he seems to have soured on Leonard

Leo, the society's co-chairman. They are said not to have spoken since 2020, when Mr Trump was aghast that Leo-recommended lawyers (and his three appointees to the Supreme Court) refused to countenance his claims of election fraud. Steve Vladeck of Georgetown University reckons a "tighter network of folks already in the Trump orbit" will have his ear this time, and one is Mike Davis, the combative lawyer who shepherded the nominations of Neil Gorsuch and Brett Kavanaugh for the Senate Judiciary Committee.

Taking the Fifth

Some of Mr Trump's most likely picks sit on the Fifth Circuit Court of Appeals, America's most conservative court. Mr Trump gravitates towards judges with sterling educational pedigrees. Judge James Ho's degrees from Stanford and the University of Chicago—along with his jurisprudential bombast, seen in his idiosyncratic arguments in abortion cases—may make him a contender. Alex Aronson, the founder of Court Accountability, an advocacy organisation, is among those who consider Judge Ho a "front-runner". But David Lat, a legal commentator, notes that Judge Ho is a "lightning rod" who could repel some moderates.

Two more judges on the Fifth Circuit could be up for a promotion. Mr Aronson calls Judge Andrew Oldham "lower-key and more buttoned-up" than Judge Ho but "every bit as partisan"; he clerked for Justice Alito and could be a tempting pick to succeed his old boss. Judge Stuart Kyle Duncan is another "MAGA bomb-thrower" to watch, Mr Aronson says, as is Lawrence VanDyke, Mr Trump's nominee to the Ninth Circuit Court of Appeals.

An unconventional pick could be Jona-

than Mitchell, who successfully argued at the Supreme Court that Mr Trump should remain on Colorado's primary ballot despite the 14th Amendment's bar on oath-breaking insurrectionists becoming president. Mr Mitchell has never served as a judge but he was the architect of Senate Bill 8, which in effect ended abortion rights in Texas nine months before *Roe v Wade* was overturned. Aileen Cannon, the district-court judge in Mr Trump's classified-documents case, earned praise from the former president when she threw out those charges. She could be up for promotion to the 11th Circuit Court of Appeals as a stepping-stone to a still higher perch.

Not all Mr Trump's likely short-listers hail from the jurisprudential fringes. Three women he installed on circuit courts would be choices closer to the mould of his first-term picks: Neomi Rao on the DC Circuit, aged 51, a former clerk for Justice Thomas; Allison Rushing on the Fourth Circuit, another Thomas clerk and only 42; and Britt Grant on the 11th (aged 46).

Ms Harris's roster of potential picks, should she win, seems more straightforward. Leandra Kruger is a 47-year-old justice on the state supreme court of California and was an excellent advocate at the Supreme Court in a dozen appearances when she worked in Barack Obama's Department of Justice. Judge Julianna Michelle Childs of the DC Circuit, a contender in 2022 to replace Justice Stephen Breyer, could reappear on Ms Harris's list.

A few of President Biden's appointees to the lower courts could be attractive picks. Two former voting-rights lawyers, Judges Dale Ho of the southern district of New York and Myrna Pérez of the Second Circuit, would counter efforts to clip the wings of the Voting Rights Act of 1965. Judge Alison Nathan of the Second Circuit could be America's first openly gay justice. Lucy Koh (Ninth Circuit), John Lee (Seventh Circuit) or Sri Srinivasan (DC Circuit) could be the first Asian-American on the court. Brad Garcia of the DC Circuit, which produces the most Supreme Court justices (including four of the current nine), is Latino, a former clerk to Justice Elena Kagan and, at 38, could serve for decades.

Yet all these prospects would struggle to be confirmed if the Democrats win the White House but lose the Senate—an outcome that may lock Justices Elena Kagan (64) and Sonia Sotomayor (70), Barack Obama's appointees, into their seats until at least 2029. Mr Trump's reshaping of the court was made possible by Republican intransigence in February 2016 when, hours after Antonin Scalia (an arch-conservative justice) died, Mitch McConnell, the majority leader, declared that his seat would remain open until after that year's presidential election. There is no reason to think Republicans will stop playing hardball. ■

The Americas



Venezuela's stolen election

After the protests, the goons crack heads

CARACAS

Yet the election theft is plain for all to see

ONLY ONE reason prevails for why Nicolás Maduro ever became Venezuela's president. It was not his skill at winning elections. Nor his willingness to steal them. It was certainly not his oratory. It was simply that his charismatic predecessor, Hugo Chávez, who had cancer, appointed him as heir. In the build-up to Venezuela's latest presidential election, held on July 28th (Chávez's 70th birthday), a video of the late populist announcing his decision, in 2012, was broadcast repeatedly as a kind of talisman.

Had he known the appalling consequences, would the *caudillo* really have chosen Mr Maduro? So disastrous has been his rule over the past 11 years that both men have now become targets of national opprobrium. In an orgy of iconoclasm the day after the president stole an election he could never have fairly won, symbols of the Chávez era were targeted, including at

least five statues of the late leader torn from their pedestals to euphoric cheers. The crowds were eager that the Maduro government be the next to fall. Pink election posters featuring a beaming Mr Maduro were ripped from street lamps and trampled underfoot. The protests were everywhere, from the slums of Caracas, the capital, to Valle Lindo, a neighbourhood in Anzoátegui state that traditionally has been deeply loyal to the regime. Predictably, Mr Maduro sent his goons onto the streets while his propagandists perpetuated lazy caricatures: those protesting were all pampered members of the middle class, or drug addicts, or vandals. The claims

→ ALSO IN THIS SECTION

30 Indigenous Brazilians

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were denied by the protesters themselves. "We're not the rich. This is the 'hood!'", chanted one group in the capital's working-class district of Petare. At least seven people, including one soldier, were dead by the night's end (as *The Economist* went to press, about 20 had died, mostly at the hands of security forces or pro-government thugs).

A day earlier optimism had risen. Venezuelans voted in what seemed like the best and possibly last chance to rid the country of the despot. Everyone knew that from the outset the process was skewed in Mr Maduro's favour. The most popular opposition candidate, the conservative María Corina Machado, the winner of earlier opposition primaries, was banned on specious grounds from taking part. Her stand-in was Edmundo González, a mild-mannered former diplomat. Mr Maduro had blanket access to a captive media; Mr González was denied that luxury.

Ms Machado, who in 2002 set up a charity which specialised in vote-monitoring, made diligent preparations in advance for possible fraud. The opposition recruited thousands of election witnesses and deployed them at the country's nearly 16,000 polling stations. Their key task was to keep a record of the *actas*, or voting receipts, which election machines

▶ print out before transmitting the results to the national electoral commission. As polls closed, people began to hope a little. “I dared believe my first ever vote would count,” said Arturo Silva, a 19-year-old student in Caracas.

It did not. When the apparatchik at the head of the electoral authority, Elvis Amoroso, announced the results, they bore no resemblance either to opinion polling before the vote, or to exit polls, or to a quick count of 30% of the *actas* conducted by the opposition. Mr Maduro, Mr Amoroso declared, had won 51.2% of the vote compared with 44.2% for Mr González. To date, the authority has not even published a breakdown of results from each polling station. Mr González and Ms Machado cried fraud and have evidence to back the claim. Their teams have collected copies of 81% of the *actas*, showing that Mr González defeated Mr Maduro in a landslide—perhaps 67% of the votes to Mr Maduro’s 30%.

The regime’s response to being called out is, preposterously, to accuse the opposition itself of massive fraud. The authorities claim that Ms Machado commissioned a cyber-attack, originating from North Macedonia, in an attempt to alter the vote. The Carter Centre, a non-profit organisation founded by Jimmy Carter, a former American president, issued a scathing preliminary report on July 30th after sending monitors to the election. It stated that Venezuela’s electoral process both failed to meet “international standards of electoral integrity” and flouted “numerous provisions” of the country’s own laws. The administration of President Joe Biden expressed “serious concerns” about the regime’s claim of victory.

Dark times lie ahead. Hours before the Carter Centre’s report was released, Mr Maduro began arresting opposition figures, including Freddy Superlano, a party leader, who was filmed being bundled into the back of a car by masked men outside his home in Caracas. Jorge Rodríguez, who is head of the national assembly and, with the vice-president, Delcy Rodríguez (his sister), among the most powerful figures in the ruling clique, brands both Mr González and Ms Machado as “fascists” and demands their imprisonment. Meanwhile Mr Maduro urges pro-regime snoopers to report protesters, via a government app.

Some protests may continue, but in a country where 7m, about a quarter of the population, have emigrated over the past decade, many lack the energy to fight any more. Besides, says one resident of Petare, “They have the weapons.” Phil Gunson of the International Crisis Group, a think-tank, says that it is unlikely that protests alone can unseat Mr Maduro.

A final hope might be the army. For the time being it remains loyal. Venezuela has among the most top-heavy armed forces in

the world, with around 2,000 generals and admirals, or twice as many as in the far larger United States. Thanks to Mr Maduro’s crony capitalism, they have been allowed to get rich, while those suspected of wavering are ruthlessly punished. Members of the armed forces make up about half of the country’s 300-odd political prisoners, as classified by Foro Penal, a legal assistance group in Caracas.

A handful of the region’s democracies still wield some influence over Mr Maduro and his regime. Brazil is probably best placed to try to deflect Venezuela from becoming an even grimmer dictatorship. Yet following private conversations with both Mr Maduro and Mr González, the chief foreign-policy adviser to President Luiz Inácio Lula da Silva of Brazil, Celso Amorim, declared to the *Guardian* newspaper on July 30th: “I am worried. I am leaving here worried.” The United States and countries in the region, bracing for more Venezuelans fleeing abroad, are right to be too. ■

Brazil’s indigenous groups

The old, dismal story continues

SÃO PAULO

Despite a change in the government, their plight is worsening

SINCE PORTUGUESE colonisers first appeared, the story of indigenous Brazilians has been littered with horror. Disease and violence killed many after the conquest. Slavery on rubber plantations existed into the 20th century. Today wildcat miners, ranchers and loggers are the threat to the indigenous peoples of Brazil.

A new report by the (Catholic) Indigenous Missionary Council tallies 1,040 deaths of indigenous children under the

age of five in 2023, an increase of a quarter compared with a year earlier and the highest number since records began in 2003. Though the increase partly reflects improved access to data in often remote regions, other figures show that the plight of indigenous people is worsening. Last year 208 people were murdered, compared with 70 in 2014. Brain defects and damaged nervous systems caused by mercury poisoning from illegal mining are also becoming more common.

Things have not always been so grim. In 1988, following a blighted period of military rule, Brazil enacted a new constitution guaranteeing rights for indigenous peoples, above all the right to protected lands. Over 600,000 indigenous Brazilians live in reserves, which cover 13% of the country (see map). For some years violence against them did fall.

Things turned for the worse after 2014, when Brazil entered a period of crisis. A president was impeached. A Congress in thrall to ranchers and miners gained ascendancy. In 2018 voters elected a far-right populist as president, Jair Bolsonaro.

He cared little about indigenous peoples. A former army captain and a son of a wildcat miner, he promised not to recognise “one more centimetre” of indigenous territory. His government proposed a law that would have legalised mining in reserves. He called the National Foundation for Indigenous Peoples (FUNAI), a government agency, a “nest of rats” and pledged to take a “scythe to its neck”. To lead it, he chose a former policeman who had once been disciplined for siding with ranchers during an operation to evict them from indigenous lands.

During Mr Bolsonaro’s four-year rule some 20,000 gold miners illegally invaded Brazil’s largest reserve, for the Yanomami people, which has 31,000 mostly isolated inhabitants. The miners felled forests and spewed toxic slush into rivers. On one occasion Mr Bolsonaro’s justice minister, Anderson Torres, alerted miners in Yanomami territory to the date and time of a police operation against them, allowing them to escape. As game fled and fish filled with mercury, malnourishment rose sharply among Yanomami people. Almost 200 died from malnutrition. Now federal prosecutors are investigating the alleged diversion of medicines from Yanomami territory during Mr Bolsonaro’s term.

The (left-leaning) president since 2023, Luiz Inácio Lula da Silva, promised vigorously to defend indigenous rights. At his inauguration Lula was led up the presidential ramp by Raoni Metuktire, the chief of the Kayapo people. He has created a ministry for indigenous peoples and put a Guajajara woman in charge. He has recognised 13 new indigenous lands, taking the total to 537. He has beefed up FUNAI and



▶ the environmental regulator, IBAMA. And he called for an emergency operation in Yanomami territory, thanks to which thousands of miners were expelled.

Yet when the operation wound down in March, about 8,000 miners returned to Yanomami territory. Reserves that have suffered the longest from mercury poisoning offer a depressing picture of what may lie ahead. Since 2016, requests for wheelchairs among the Mundurucu people, whose territory lies east of the Yanomami, have grown by 135%, mainly for children with atrophied limbs. Developmental difficulties, blindness and loss of feeling in the hands and feet are all becoming much more widely documented.

Despite the federal government's actions, indigenous groups will remain vulnerable. It does not help that the price of gold has more than doubled since 2016. Criminal groups are piling in. Melina Risso of Igarapé Institute, a think-tank in Rio de Janeiro, says that in the past five years a

"criminal ecosystem" has emerged in the Amazon basin in which illegal gold miners, loggers and traffickers of drugs and wildlife co-operate over logistics and needs such as fuel, helicopters and guns. Between 2018 and 2021 the number of firearms registered in the Amazon region tripled to 184,000. Murders in Amazonas state are 42.5 per 100,000, compared with a national average of 22 per 100,000.

A final worry is a bill approved by federal lawmakers last year. It bars the recognition of indigenous land if the tribes in question cannot show that they were occupying it in 1988. The Supreme Court has ruled the bill unconstitutional and Lula has vetoed it. But Congress then overturned his veto. A court-mandated "process of conciliation" gets under way on August 5th, involving a congressional commission. Many indigenous Brazilians hope that conciliation does not mean that they face further pressures on their health and their livelihoods. ■

Mexico's drug gangs

First El Chapo, now El Mayo

The arrest of a top Sinaloa Cartel leader is a coup, but may not dent criminal activity

ISMAEL "EL MAYO" ZAMBADA is far less well-known than his fellow founder of Mexico's Sinaloa Cartel, Joaquín Gúzman, or "El Chapo". With his daring prison escapes and a craving for notoriety, El Chapo became the face of the gang, until his capture in 2016 and his incarceration for life in a "supermax" prison in the United States. Yet for all his low-key manner, El Mayo was every bit as important in building the Sinaloa operation into a vast and violent drugs and money-laundering syndicate. Its connections ran deep into Mexico's political establishment and it controlled the lion's share of the North American market for illegal drugs. It was therefore a stunning coup when the United States arrested Mr Zambada on July 26th along with one of El Chapo's four sons, Joaquín Gúzman López, in Texas.

More will emerge about how the men came to be detained. Perhaps Mr Gúzman López, another Sinaloa bigwig like his three brothers, helped the authorities lure Mr Zambada onto a private plane to El Paso, under the pretence that he was going to inspect clandestine airfields in northern Mexico. Perhaps it was part of a deal between Mr Gúzman López and American prosecutors that would benefit him or his family. But Mr Zambada may also have been in negotiations to turn himself in; he

may have wanted a story to conceal that.

Whatever the details, the Americans are cock-a-hoop. They have long accused Mr Zambada, who is 76, of controlling a huge drug-trafficking operation to the United States, from heroin and cocaine to, these days, synthetic drugs. Lately they have also pointed to the four "Chapitos" as



He used to shun the front page

critical figures in trafficking fentanyl, the powerful opioid that caused almost 75,000 deaths in the United States last year alone. Mr Zambada was something of a surrogate father to the Chapitos. But more recently his ties with them grew strained as the Chapitos' behaviour grew more brash.

The United States has been central to confronting Mexico's criminal gangs. Its co-operation with Mexico under the administration of President Andrés Manuel López Obrador is not as close as it was under his predecessors. Indeed, its penetration of Mexico's drug gangs shows up the Mexican government's ineptitude and corruption, says Eduardo Guerrero, a security analyst in Mexico City. Ostensibly to reduce bloodshed, Mr López Obrador has taken a hands-off approach to Mexico's criminal outfits—though he has recently helped the United States more.

Some argue that a strategy of only going after high-value targets is flawed. Mexico's "war on drugs" from 2006 complicated the criminal landscape and shed more blood. With leaders removed, others wrestled for control. As groups splintered and fought among themselves, murders in Mexico leapt: there are now 30,000 or more a year. Better, argues Vanda Felbab-Brown of the Brookings Institution, a think-tank in Washington, to devote more resources to capturing the middle management beneath the bosses.

The consequences of the latest Sinaloa arrests remain unclear. The United States now has two of the four Chapitos in custody. There may be a tussle for control of the Sinaloa Cartel, with the possibility of an orgy of infighting. There are reports of Mr Zambada's son taking control of his faction, while the two Chapitos still at large have assumed control of their family's side. That may not be a stable arrangement. Any weakening of the Sinaloa lot could be to the advantage of the Jalisco New Generation Cartel, the other of Mexico's big two gangs. Whatever happens, the hugely profitable trafficking of fentanyl is unlikely to be much impaired.

Dish the dirt

Still, the arrest of Mr Zambada may prove significant. The United States may be able to extract powerful intelligence from him. As Ms Felbab-Brown notes, Mr Zambada has been Mexico's "corruptor-in-chief". The hope is that he provides information on vast networks of collusion that exist among politicians, bureaucrats and law and security officials. Last year the United States convicted Genaro García Luna, a former minister of public security, of taking money from the Sinaloa Cartel. Surely bringing down many more Mexican officials, as well as gangsters, would laudably undermine the country's pernicious criminal networks. ■

Middle East & Africa



On all fronts

Two knocks in the night

JERUSALEM AND BEIRUT

Israeli strikes on Beirut and Tehran could intensify a regional war

SEVEN HOURS and 1,500 kilometres separated the air strikes in two Middle Eastern capitals. Both were part of an Israeli operation that could lead to a dramatic escalation in a regional war which has been raging for nearly ten months.

The first, around 7.30pm local time on July 30th, targeted a flat in the southern suburbs of Beirut. Visiting the apartment was Fuad Shukr, a military adviser to the leader of Hizbullah, a Lebanese Shia militia and political party. He was killed; so were at least five civilians. A few hours later another missile hit—this time, at a nondescript home in Tehran. It killed Ismail Haniyeh, the leader of Hamas, the Palestinian Islamist movement which began the war on October 7th with a surprise attack that killed 1,200 people in Israel.

Israel's choice of targets was both tactical and symbolic. Mr Shukr was central to Hizbullah's military operations since its founding. He was thought to be involved in

the attacks on American and French military barracks in Beirut in 1983. Israeli intelligence believes he was a critical link in shipments of Iranian guidance systems for Hizbullah's long-range missiles.

As Hamas's political chief, Mr Haniyeh was less involved in military matters. He is believed to have been told of the October 7th attack just minutes beforehand. Since 2017 he has been the group's public face, based in Qatar and shuttling across the region. He was an important interlocutor in ceasefire talks with Israel.

Israel has claimed responsibility only for the Beirut strike, calling it retaliation

for a rocket attack on Majdal Shams in the Golan Heights three days earlier, which killed 12 children. The rocket was almost certainly fired by Hizbullah (though the group denies it).

Since October 8th, when Hizbullah began attacking Israel in support of Hamas, both sides have mainly targeted military positions and depopulated border towns. The massacre in Majdal Shams and the killing of Mr Shukr break those unspoken rules of engagement. Both Israelis and Lebanese worry about further escalation.

Neither Israel nor Hizbullah has an interest in a wider war—but they are preparing for one. There have been reports of Hizbullah putting its long-range missiles on launchers and Israeli security officials have made it clear that, in contrast to October 7th, their forces are poised and ready for a much wider campaign.

The onus is now on Hizbullah to decide on the scale of its response. It took them more than a day to announce Mr Shukr was dead—a sign, perhaps, that they will act cautiously. A major attack on Israel could draw in America, which has deployed significant forces to the region. Lloyd Austin, the defence secretary, said on July 31st that America would “defend” Israel if it was attacked. He had spent the previous few days counselling Israel not to attack Beirut, lest it trigger a bigger conflict. ▶▶

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► Hizbullah's response will also be influenced by Iran, its main patron. So far Iran has not been eager to see its most powerful proxy dragged into a bigger war. That would risk squandering its decades-long investment in Hizbullah. But Israel's decision to assassinate Mr Haniyeh on Iranian soil may change the calculus. Israel has not taken responsibility for the killing, giving the Iranians room for manoeuvre. At first Iranian officials also avoided ascribing blame. But a few hours later Ali Khamenei, the supreme leader, did away with such ambiguity. Israel "martyred our dear guest in our territory", he said.

Iran has struck Israel directly once before: it launched more than 300 missiles and drones in April, in retaliation for an Israeli strike that killed several high-ranking officers at Iran's embassy compound in Damascus. Israel hit back with a pinpoint strike on an Iranian anti-aircraft radar, and the round was over.

This time Iran must decide whether it can risk a bigger conflagration. It is going through a sensitive political moment. Mr Haniyeh was killed hours after he attended the inauguration of Masoud Pezeshkian, Iran's new president, who was elected after his predecessor was killed in a helicopter crash in May. This was probably not how he envisaged his first day on the job.

Iran has seen how its strategy of surrounding Israel with proxies has succeeded. But it has now also seen Israel strike at its most vulnerable points, from Tehran and Beirut to Hodeidah in Yemen. It has also watched a de facto coalition emerge, with an American carrier group in the Persian Gulf, an international task force in the Red Sea and even Arab regimes intercepting Iranian-made missiles launched at Israel. This has given Iran some pause.

Even as Israel, Hizbullah and Iran inch toward a wider war, Israel and Hamas had been edging towards a ceasefire agreement. Talks have been going on for months, but in recent weeks negotiators seemed guardedly optimistic that both sides would accept a framework for a staged withdrawal from Gaza and the release of 115 hostages still held there.

Two men will ultimately decide whether those talks succeed. Yahya Sinwar, the leader of Hamas in Gaza, is increasingly isolated. On August 1st Israel announced it had killed Muhammad Deif, the Hamas military chief, in a strike three weeks prior. Gazans have endured immense suffering: almost 40,000 have been killed, and most of their buildings destroyed or damaged. All of this has pressed Mr Sinwar hard to make a deal. Mr Haniyeh's assassination will delay ceasefire talks, but it will not change the underlying situation in Gaza.

Binyamin Netanyahu, the Israeli prime minister, has been ambivalent about a deal. He has authorised talks with Hamas,

through Egyptian and Qatari mediators, but has repeatedly added new conditions to Israel's initial proposal. These include a continued Israeli presence along the border between Gaza and Egypt. Israel's war-weary defence chiefs favour a deal, partly because they want to focus on the much bigger threat from Hizbullah. Officials involved in the talks accuse Mr Netanyahu of giving priority to politics: the far-right ministers in his government oppose any ceasefire while Hamas is still standing.

The assassinations could give Mr Netanyahu the political tailwind he needs to make a deal—if indeed he wants to. He could claim to have responded to the October 7th attack and to have brought enough retribution on Israel's enemies: the elusive "total victory" he has promised. But before he can decide, he will need to wait for Hizbullah and Iran to respond to the assassinations—and to see whether he has a much bigger war on his hands. ■

The future of Hamas

War or politics?

DOHA, ISTANBUL AND RAMALLAH

After Israel's assassination of Hamas's leader, the group faces a dilemma

ON PAPER Ismail Haniyeh, assassinated in Tehran on July 31st, was Hamas's supreme leader. When in 2022 he ran for a second term in that role, he was unopposed. But for the past ten months, since Hamas's attack on Israel on October 7th, he has often looked more like a postman. The focus of leadership shifted to Gaza, while Mr Haniyeh ran the political wing from Qatar. The decision to continue war or seek a ceasefire has lain with the Qasam Brigades, the military wing led by Yahya Sinwar. Mr Haniyeh relayed messages.

In the short term the assassination tightens Mr Sinwar's grip. But more pragmatic Hamas types think his decision to mount the attack in October squandered two decades of state-building. They want to reconstitute Hamas as a political movement and an arm of the Muslim Brotherhood, the Islamist group that is its ideological parent, rather than remain a band of jihadist guerrillas. In any event, Mr Haniyeh's death is likely to spark a struggle within Hamas that could determine its future—and that of Palestine itself.

Much will depend on how Hamas reassesses the Gaza war. Start with Mr Sinwar's supporters in the group. Although he unleashed his fighters on Israel with cavalier disregard for the consequences of Israel's inevitable retaliation, some within Hamas still celebrate this as a military achieve-

ment. Never before had Palestinians seized land within the lines laid down in 1948, when Israel was born. Never before had they overrun army bases, killed so many Israelis and taken so many hostages. The attack, Hamas's cheerleaders insist, punctured Israel's aura of invincibility, while its retaliation sullied its standing. Mr Sinwar's approach, they claim, has been vindicated.

It took Mr Sinwar years to build his authority. After a fractious internal election in 2017 he chased out civilian rivals, including Mr Haniyeh. Big decisions were thereafter made by the military command. Some 80% of recruits had to do military service, reckons an analyst close to the group.

Mr Sinwar has dabbled in politics, too. Like Fatah, Hamas's secular Palestinian rival, he tried negotiating with Israel. In 2019 he offered Binyamin Netanyahu, the Israeli prime minister, a long-term ceasefire brokered by Egypt, which Mr Netanyahu at first accepted, then spurned. Only violence, concluded Mr Sinwar, would force Israel to make concessions.

His followers boast of facing down the region's strongest army for ten months. By Israeli estimates, Hamas still fields a fighting force of more than 10,000 (the group's figure is bigger). And Mr Sinwar is still alive. His fighters have killed hundreds of Israeli soldiers. Wherever Israel withdraws within Gaza, they reinsert themselves. As Mr Sinwar's disciples tell it, Hamas has proved the most effective Palestinian fighting force since 1948.

Now consider those who question Mr Sinwar's actions. Pragmatists lament that the assault has reduced their statelet to ruins. In the lead-up to October 7th, most Palestinians in Gaza had rarely had it so good—admittedly starting at a low bar. New roads and resorts had sprouted on their small strip of land. Israel let back in ►►



Out of the frame

▶ thousands of labourers from Gaza, for the first time in more than 15 years.

Now most Gazans, homeless and hungry, loathe Hamas. Their death toll is nearing 40,000, far greater than that of the *nakba*, or catastrophe of 1948. Gaza's landmarks—its medieval hammams, mosques and handsome villas—are piles of rubble. "It's the worst period in the history of Palestine," says one Gazan in exile.

Hamas's reputation for imposing law and order in Gaza has been shredded, too. Pillage is rife. Gunmen who may belong to Hamas have looted Gaza's banks. Graffiti announce the verdicts of kangaroo courts, while thugs knee-cap the accused and toughs beat up critics. An opinion poll in June showed support for Hamas's rule in Gaza had slumped to under 5%, compared with 39% in the West Bank. A day of reckoning may ensue when its fighters emerge from their tunnels: "He'll be pummelled when he comes up," says a writer in Gaza, referring to Mr Sinwar. And some fighters never will. Israel killed Muhammad Deif, the group's military chief, in a strike in July.

Hamas has not made much diplomatic ground either. Many Arab governments ban it, just as Western ones do. Iran and its proxies have failed to rescue it—or to keep its leaders safe. If expelled from Qatar, it might struggle to find another haven. Iraq's government, though close to Iran's, has said no. Chaotic Yemen might offer one. Outside Gaza, criticism of Mr Sinwar's decision for war courses through the ranks.

When the war stops, both Hamas and Gaza's beleaguered people might want a new type of leader. Of the frontrunners to replace Mr Haniyeh, Khalil al-Haya is the closest to Mr Sinwar—and even he has suggested that Hamas could disarm. Another contender is Nizar Awadallah, a stalwart from Hamas's inception who stood against Mr Sinwar for the group's leadership.

The strongest candidate may be Khaled Meshaal, who headed the group until 2017, whereafter Mr Sinwar strove to marginalise him. A scholar raised in Kuwait with many diplomatic contacts, Mr Meshaal comes from the West Bank. He might want Hamas to come under the Palestinian Liberation Organisation, the national umbrella, even if it had to accept its previous agreements recognising Israel. In the past he has also advocated breaking with Iran and Hizbullah, its Lebanese proxy, and turning to Sunni Arab states for support.

Whether the Qassam Brigades would agree is unclear. Anyone hoping to rule Gaza after the war would need their backing. But most Gazans yearn for respite and reconstruction. "Hamas's leaders realise that October 7th was a miscalculation," says Muhammad Daraghmeh, a Palestinian journalist with good sources among Hamas's leaders. Will the group's next boss agree? ■

Ethiopia

The scourge of kidnapping

NAIROBI

As the government hails a new IMF deal, lawlessness is spreading

THE ROAD from the Ethiopian capital, Addis Ababa, to the town of Debarq in the northern highlands is one of the country's busiest thoroughfares. These days it is also among the most dangerous. In recent months travellers have been terrorised by armed gangs who kidnap bus drivers and their passengers for ransom. On July 3rd more than 100 people were taken hostage by highwaymen demanding up to 1m birr (\$17,500) per captive. "We're too poor to pay," says one relative. The sibling of another hostage says the kidnapers warned families that without payment they would never see their loved ones alive again.

The government of Abiy Ahmed, Ethiopia's prime minister, does not want to talk about kidnapping. It would rather discuss its efforts to kickstart a debt-laden economy. On July 28th Abiy announced a series of liberal reforms that enabled a long-awaited deal with the IMF for a \$3.4bn loan secured a day later. More market-friendly reforms will encourage donors and investors. But so too would political stability. Negotiations with the IMF had been held up for more than two years by civil war in the northern region of Tigray, in which more than half a million people are thought to have died. Abiy's government hopes the deal signals to the outside world that Ethiopia is returning to normality.

That is optimistic. A peace deal signed in 2022 between Abiy's federal government and the authorities in Tigray brought a

measure of calm to that region. But the good news ends there. In neighbouring Amhara, Ethiopia's army has been battling regional militias known as the Fano for more than a year. In Oromia, the region surrounding Addis Ababa, it is fighting against the Oromo Liberation Army (OLA), a rebel movement which says it is struggling for the self-determination of Ethiopia's largest ethnic group. Neither conflict is close to ending: talks between the government and the OLA failed in November; prominent Fano leaders have ruled out negotiations. If anything, the violence is becoming more entrenched—not just in these regions but elsewhere, too. "It's metastasising," says a Western diplomat. "It's quite, quite terrifying."

The extent of kidnapping shows why. What began as isolated incidents confined to the remote parts of Oromia, where the state has always been weak, has spread across the country (see chart). Targets were once chosen for their political significance. Now almost anyone is at risk outside Addis Ababa. Even Tigray, renowned before the war for its strong internal security, has recently witnessed a spate of abductions for ransom.

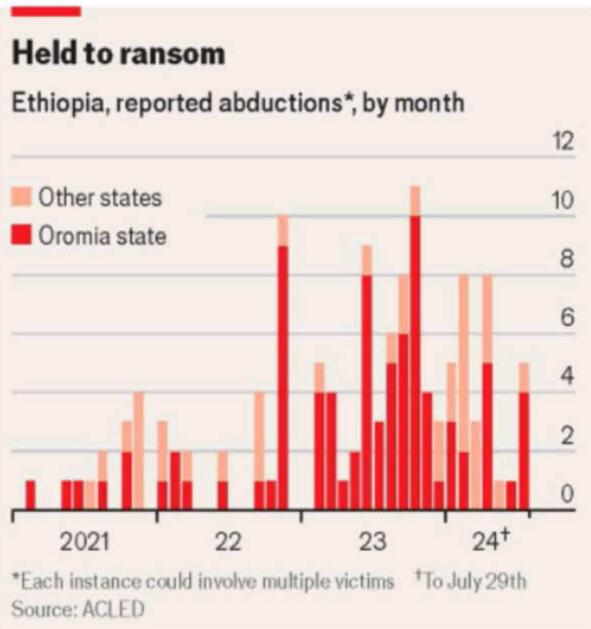
Several trends underlie the crisis. The first is the weakening and fragmenting of Ethiopia's armed opposition movements. The OLA, for instance, has little to show for more than five years of insurgency. It has yet to win control of a single urban centre; threats to take over the capital have repeatedly proved empty. Funding from supporters in the overseas diaspora is thought to have dried up. So splinter groups proliferate and resort to kidnapping and other forms of extortion to stay afloat.

The second trend is a weakening of the state. In large parts of the country the government has lost its monopoly on force. In north-west Amhara it is unable to protect refugees from neighbouring Sudan. They report almost daily predations by bandits and militiamen. In post-war Tigray some frustrated members of the Tigray Defence Force, the regional paramilitary outfit which fought against the federal government, have taken to the bush. Across the north lurks the spectre of what in Ethiopia have historically been known as *shiftas*: armed outlaws surviving off plunder.

The state is also in some ways complicit. The line between rebel and government today is blurred. Victims of kidnap- ▶▶



Be careful on the road



Milking it

Under the hump

SALAHLEY

Somaliland's camel herders see commercial prospects in their dairies

IT IS MILKING time on Mustafa Duale's farm and the camels are lowing: an eerie groan, like the creak of an old door. A dozen herders strain the milk through a sieve into metal pails. They will sleep here tonight, in the open, beside a pen of thorns. The pails will be loaded into the back of an estate car and reach Hargeisa, the capital of Somaliland, with the setting sun.

Mr Duale watches over his reading glasses, looking every inch the engineer that he is. The city is his home, and boreholes his trade. But in Somaliland, an unrecognised state on the Gulf of Aden, camels are a form of wealth. "My father and grandfather were herders," says Mr Duale. "It's like it's in my genes." He is one of a group of entrepreneurs who are turning a long-standing trade in camel milk into a commercial business.

Hargeisa was not always a good place to be a milkman. The Somali air force flattened it in 1988 during a civil war. So total was the devastation that Somalilanders—who had been governed for 31 years as part of Somalia—decided to declare their independence in 1991. One former rebel remembers marching through the streets of the capital that year and finding a single functioning tea shop.

But today Hargeisa is home to 1.2m people and more tea shops than a camel herder could shake his stick at. Half a litre of Mr Duale's milk goes for \$1.30. Cafes sell vanilla and strawberry flavoured camel

milkshakes for almost \$2. The rejuvenated city is both a ready market and a source of capital, as townsfolk invest their savings in the hinterland. Mr Duale has built a reservoir to irrigate fields where he grows fodder for his 400 camels. Smaller camel herders without any pasture of their own also give him their animals to look after in exchange for a fee.

Other camel farmers have made circuitous journeys, travelling even farther than their nomadic forefathers. Mohamed Isaq escaped to Canada during the civil war but after three decades there his IT job was giving him the hump. He returned to Hargeisa and started a camel farm. "I thought I could kill two birds with one stone: have a business and drink camel milk," he says, swearing by the restorative power of his creamy produce.

The industry is not yet ready to export, which would need equipment to pasteurise the milk and keep it cool. But the demand is there. Mr Duale is discussing opportunities with Camel Culture, an American firm that sells camel milk to African and Arab migrants eager for a taste of home. Other markets are growing, too. A Chinese firm hopes to open a factory to make camel-milk powder over the border, in the ethnic-Somali region of Ethiopia. Camelicious, a firm based in Dubai, uses camel milk to make ice cream with flavours such as dates, saffron and cardamom.

Somaliland still struggles to attract investment, despite the go-getting spirit of its people. "Investors will not risk their money because most of them—especially big companies from the West—will say it's an unrecognised state," laments Abdirizak Ibrahim Mohamed, the investment minister. But hope is hidden in the very word "Somali" itself. Some folk etymologists speculate it comes from the phrase *soo maal*: literally, "Go milk!" ■

ping regularly accuse officials and security forces of involvement, whether by turning a blind eye or taking a share of the ransoms. Officials and rebels are known to cut deals. Earlier this year the government is understood to have paid off local rebels before the inauguration of a luxury resort in order to avoid an incident in the presence of foreign dignitaries. And the government has an indirect hand in the lawlessness, since police routinely arrest people only to demand a "fee" to release them. The line between hostage-taking and policing can be fuzzy, too.

Blame the victims

All of this is compounded by the dire state of the economy. Parts of northern Ethiopia are nearing famine. Civil servants go months without pay. For the growing number of unemployed youth, joining a rebel group may be the only option. "It is a marketplace of militias," says Jonah Wedekind, a researcher. "Whichever entity provides the best material incentives for fighters to join gains the upper hand."

Many Ethiopians complain that the government is indifferent to their plight. Addis Ababa, after all, is mostly safe. Officials and wealthier Ethiopians can avoid perilous roads by flying (Ethiopian Airlines, the state carrier, is enjoying a spike in domestic traffic). When pressed in a recent meeting with opposition parties, the prime minister appeared to blame the public, suggesting that the security forces could not enforce the law because elements of the local population were sheltering "kidnappers and looters".

Yet his government's economic ambitions depend on law and order. Foreign investors are running scared: a \$2bn geothermal project in Oromia was recently abandoned because of insecurity. At the heart of the prime minister's vision for the country is high-end tourism. But tourists demand safety no less than foreign investors. "Ethiopia is shrinking into Addis Ababa," says a veteran businessman. "And kidnapping is largely responsible." ■



Next stop: camel milkshakes

Asia



A military transformation in the Pacific

Less Nimitz, more MacArthur

MANILA AND TOKYO

America recreates a warfighting command in Japan

KADENA AIR BASE in Japan (pictured), America's largest in the Pacific, is roughly 650km from the coast of China as the missile flies. Jets roar constantly over children's playgrounds on their way to and from patrols. But American forces there have been on a peacetime footing since the end of the Vietnam war. That changed on July 28th, when Lloyd Austin, America's defence secretary, announced the creation of a new warfighting command to oversee all American forces in Japan.

The "historic" shift, as Mr Austin calls it, is a sign of the alarm with which America and Japan regard the threat from China, which is rapidly building up its armed forces. The new headquarters will help strengthen the defence of Japan—once a seen as a rear base for operations but increasingly likely to be on the front line of any conflict with China. It will also mirror Japan's own plans to create an American-style joint command to fuse air, sea, land

and other forces early next year.

"This is finally the transformation of US-Japan relations from what used to be mainly a basing agreement, to project US military power, into a true military alliance," argues Christopher Johnstone of the Centre for Strategic and International Studies, a think-tank in Washington. The move may deepen China's worries about encirclement and intensify complaints that America is building an "Asian NATO".

That is a long way from reality. America's allies in Asia have no mutual obligation to defend each other, as do members of NATO. Right now US Forces Japan (USFJ)

is mainly an administrative headquarters for units based in the country, and to liaise with the Japanese government. The real warfighting commander, Admiral Samuel Paparo, head of Indo-Pacific Command, is based 7,500km to the east, above Pearl Harbour in Hawaii.

That set-up, dating from when Admiral Chester Nimitz masterminded many of the naval battles and island-hopping campaigns against Japan in the second world war from Hawaii, has looked increasingly implausible. Jeff Hornung of the RAND Corporation, another American think-tank, says that in any war with China communications with front-line forces in Japan and elsewhere in the western Pacific are likely to be heavily disrupted, whether by cyber-attacks, sabotage of undersea cables or strikes in space against satellites.

Thus the creation of a forward-deployed operational command, well within the range of China's missiles, brings memories of Douglas MacArthur, who fought many of the battles against Japan—in the Philippines and Papua New Guinea—much closer to the action than Nimitz (sometimes dangerously so). He later ruled Japan after its surrender.

The revamped USFJ will be run by a three-star general, who will answer to Admiral Paparo. The Japanese had pushed for a four-star officer, akin to General Paul La-

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▶ Camera, who commands American forces in South Korea. American officials note, however, that in wartime the general would take over command of both American and South Korean forces. In Japan the two armed forces take orders from their separate chains of command, even in a crisis.

Nevertheless, the aim is to integrate exercises, planning and ultimately fighting more closely. “When this transition is complete, USFJ will have a direct leadership role in planning and leading US forces, in both peacetime and potential crises,” says a senior American official. “They will be doing that side by side with Japanese forces like never before.”

Mr Austin was joined in Tokyo by Antony Blinken, the American secretary of state, for a meeting of the “2+2”—ie, of American and Japanese foreign and defence ministers. They warned of the “increasingly severe security environment” created by North Korea, Russia and above all China, not least through their nuclear threats and build-up. Against that, they hailed their alliance as “stronger than ever”. Beyond building the joint commands, they agreed to boost production of scarce air-defence and long-range strike missiles, and to increase deployments around Japan’s south-western islands close to Taiwan. America reaffirmed its “ironclad” commitment to defend Japan with its full might, including nuclear weapons.

In 2022 Japan announced it would sharply increase defence spending by more than 60%, to 2% of GDP, by 2027, and would acquire long-range missiles able to reach mainland China. For the foreseeable future it would be able to launch such long-distance strikes only with intelligence and other support from America.

Building blocks

The new American headquarters will be built in a phased process, about which there are many unanswered questions: the size of the command, its powers, location and area of responsibility, and the scope for other allies in the Indo-Pacific to be incorporated into operations. Many of these issues are sensitive, whether because of American inter-service rivalries or Japan’s struggles to shed its pacifism. “Both left and right would prefer Japanese forces to retain greater sovereignty,” notes Watanabe Tsuneo, of the Sasakawa Peace Foundation, a Japanese think-tank.

One question involves American politics. President Joe Biden’s administration is seeking to strengthen the growing “lattice-work” of new security arrangements on top of its old alliances in Asia before the American elections in November. This involves institutionalising such things as the burgeoning three-way military co-operation with Japan and South Korea.

And it means beefing up other parts of

the “island chain” that girdles China, from Japan to Malaysia. At another 2+2 meeting in Manila on July 30th, America announced a big push to modernise the Philippines’ armed forces and coastguard, which have faced intense harassment by China around disputed parts of the South China Sea. The tension has eased somewhat in recent days, after a still-undisclosed deal allowed the Philippines to re-supply its garrison on a rusting ship grounded on the Second Thomas Shoal. But the truce may not hold for long. America’s “once in a generation” package includes \$500m in military aid.

With a further 2+2 with Australia due to be held in Annapolis on August 6th, American officials speak of “the ten most consequential days” for the Biden administration’s defence policy in the Indo-Pacific. But how much can really be established before its term runs out is unclear. The new American headquarters in Japan will probably not be running when the Japan Joint Operations Command (J-JOC) begins work in March 2025. Congress, which must authorise the headquarters and appropriate the funds for it, is largely paralysed.

A further uncertainty is what all these efforts would mean in a crisis over Taiwan, a self-governing island which China is determined to retake, by force if necessary. How far would the new command be involved if American forces decided to defend Taiwan? Conventionally, America has seen its role as the “spear” that would take on Chinese forces, with Japan as the “shield” to defend its territory and American bases. Whether such a distinction can be maintained in a war is doubtful.

That said, Japan is fast shedding its coyness about Taiwan, which it ruled for half a century, until 1945. The late prime minister, Abe Shinzo, declared that “a Taiwan contingency is a Japan contingency”. It was telling that earlier this month Japanese and Taiwanese coastguard vessels held joint sea-rescue exercises. Japan is donating coastguard vessels and maritime radars to the Philippines. Japan has also signed “reciprocal access agreements” with both Australia and the Philippines to host each other’s forces.

If successful, the joint-forces model could spread. America last month set up a joint headquarters (under a two-star commander) to improve the defence of Guam, an American island territory. Some talk of doing something similar in Australia, where American forces are building up their presence. Having several headquarters across the Pacific and expanding when needed would strengthen America’s resilience. MacArthur knew all about command under fire. But the headquarters back in Pearl Harbour will still prove vital—just as it was to Nimitz and America’s success in winning the Pacific war. ■

Military drills

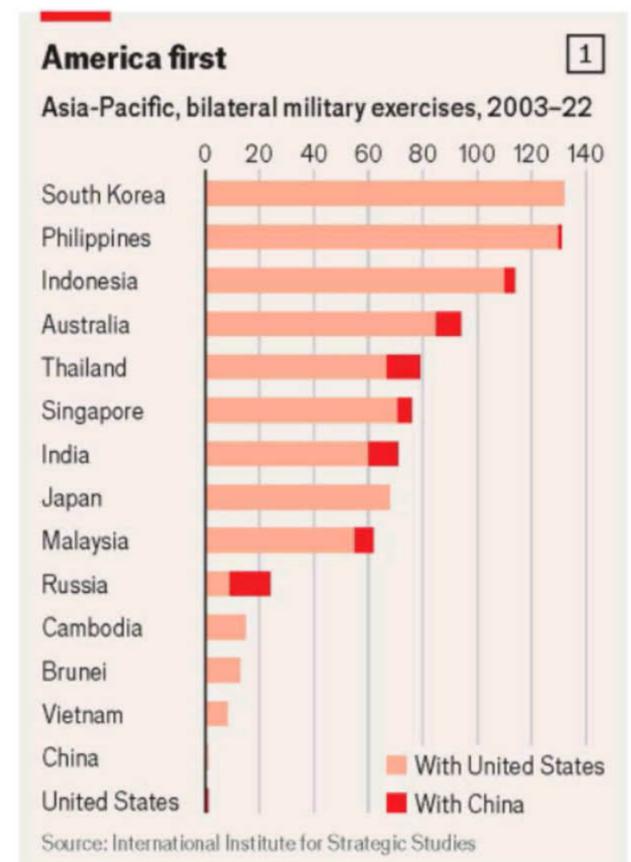
Double act

For military exercises, America remains Asia’s partner of choice

AS A DEMONSTRATION of brute sea power, few events can match the biennial Rim of the Pacific exercise (RIMPAC) hosted by America in Hawaii. The world’s largest naval drill, which was due to finish on August 2nd, after this article was published, has brought together 25,000 sailors, airmen and soldiers from 29 countries. Over the past month like-minded navies have honed their skills on tasks ranging from disaster relief to anti-submarine warfare. It has included a “sinking exercise”: the opportunity to torpedo a rusty, 36,000-tonne American amphibious-assault ship.

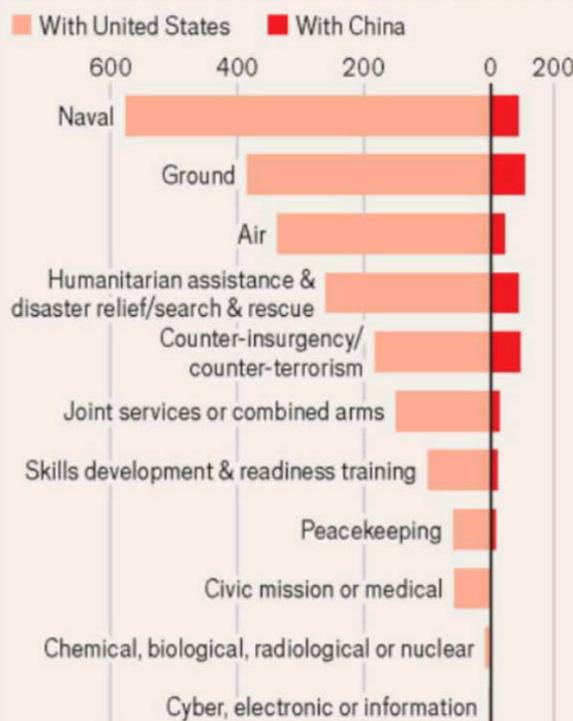
Beyond the martial pomp, exercises like RIMPAC serve as a way to cement and bolster relations. And when it comes to wooing regional states, America continues to thump China as the exercise partner of choice in the region. A survey of military exercises held in Asia between 2003 and 2022 published by the International Institute for Strategic Studies (IISS), a think-tank in London, shows that America took part in 1,113 exercises with regional countries. China mustered a paltry 130 drills over the same period (see chart 1).

What explains the disparity? It suggests how each country would fight, were a war to break out. China would be fighting in its own backyard; America would be a long way from home and relying on the support and capabilities of its allies, notes Evan Laksmana, a co-author of the survey. ▶▶



Haul away, Joe

Asia-Pacific, military exercises by theme, 2003–22



Source: International Institute for Strategic Studies

Urbanisation

Megalopolis

MUMBAI

Indian cities are utterly unprepared for what is about to hit them

THE BRITISH, under whose colonial rule Bombay grew from a collection of mosquito-infested islands into a metropolis, called their creation “Urbs Prima in Indis”—the first city in India. So it remains. Home to corporate headquarters, the country’s biggest port, and the film and television industries, Mumbai—as it has been called since 1995—is the richest, densest and most liberal city in the country. It is urban India at its most intense.

It is also the most extreme example of the myriad problems facing all Indian cities. Mumbai has more billionaires than any city in the world barring New York and London, but it also has a greater proportion of people living in slums than any other Indian city. It has been battered in recent weeks by incessant monsoon downpours that, as they do every year, have caused flooding and destroyed roads. Its public transport is bursting at the seams. On average, seven people are killed on the commuter-rail system every day.

The government’s answer is to build more. Projects already under construction include a six-lane highway along the western coast, a series of bridges linking the western suburbs, roughly a dozen metro lines, a new airport, a high-speed rail link and a plan to rehouse the million-odd residents of Dharavi, a giant slum, at the cost of tens of billions of dollars.

Splurging on infrastructure, though



When it rains, it pours

necessary, will not be enough. Metro lines and coastal highways were first proposed in the 1960s, when Mumbai’s population was just over 5m. Today that number is estimated at around 20m. It is projected to double by 2050. So is the population of urban India as a whole. “If you think that urbanisation is a problem today...try overlaying another Mumbai on top of this Mumbai,” says Shashi Verma, who oversees technology at London’s transport authority and advises Indian policymakers on a pro bono basis. Preparing for this growth, says Mr Verma, “is not tomorrow’s problem. It’s not even today’s problem. It is actually yesterday’s problem.”

India is far from ready. No one knows how many people live in its cities today. The last census was taken 13 years ago. The central government shows no signs of conducting a fresh one. The census definition of an urban area is narrow, but even by its strict standards one in three people lived in cities in 2011. Today perhaps as many as one in two do. One thing is clear: the hundreds of millions of urban Indians will soon be joined by hundreds of millions more. Yet the Ministry of Housing and Urban Affairs was allocated a mere 1.7% of the national budget announced on July 23rd. For India’s cities to cope, urban authorities must focus on three things.

The first is to deal with the main reason that cities fail to build adequate housing: land-use regulations. An overly prescriptive, 2,200-page National Building Code and a surfeit of local rules prevent developers from making optimal use of pricey urban land. Mumbai has some of the most restrictive land-use regulations of any global megacity. In most well-functioning cities about 90% of land is given over to streets, public spaces and buildings. In Mumbai and other Indian cities, those uses take up less than half of the land area, according to analysis by Bimal Patel, an urban planner. The rest is wasted on “private open spaces”—mostly building compounds that are walled off and put to no good use.

The result is that Indian cities are sparsely built-up yet feel densely crowded, note Sanjeev Sanyal and Aakanksha Arora of the prime minister’s Economic Advisory Council. Cities sprawl outwards, driving up the cost of providing infrastructure.

Making India’s cities denser and more affordable would help with the second challenge: public transport. If India’s cities are to double in size, private vehicles cannot be the answer. Of the world’s ten most gridlocked cities, three are in India. The government has splashed out on costly metro-rail systems in recent years, but less glamorous (and more useful) public bus networks have been neglected.

The third issue facing India’s cities is climate change. This year the country experienced its longest-ever heatwaves. They

▶ That sort of coalition warfare requires regular and intense training to smooth out potential kinks in communications or technology. China, by contrast, is unlikely to have any real allies to fight alongside in the first place. Although it trains with Russia in the region, the Kremlin’s clapped-out navy is unlikely to offer much brawn.

Second, combined military exercises depend on trust, and few countries trust China. It claims nearly the entirety of the South China Sea as its own, and uses its navy and coastguard, as well as “maritime militias” of armed fishing fleets, to intimidate its neighbours. That imposes a limit on how many states are willing to train with China, says Ian Storey of the ISEAS-Yusof Ishak Institute, a think-tank in Singapore. China has sought to alleviate those fears by conducting more prosaic exercises, such as counter-terrorism or disaster relief (see chart 2). But these are often relatively unsophisticated, says Mr Storey.

Of course, China sees some value in doing joint exercises, not least because it can get its eyes on Western military gear. Its ad hoc partners, such as Singapore and Thailand, operate Western-built platforms and systems. They also offer a shop window for China’s own military kit. Moreover, for a country that has not fought a big war in four decades, joint exercises offer an opportunity to practise.

Ousting Uncle Sam as Asia’s pre-eminent defence partner will be tough. The IISS report concludes that China is likely to focus on deepening ties with a smaller group of countries, such as Pakistan, Russia and Thailand. But for American officials the fact that more regional countries are interested in its exercises is yet further evidence that its alliance-building efforts in the region are working. ■

▶ will only become more frequent, India's chief meteorologist told a local newspaper. Urbanisation is itself a cause of higher temperatures, accounting for roughly 38% of warming in Indian cities, according to a recent study. Concrete and tarmac retain heat, cars stuck in traffic radiate it and air-conditioners breathe it out. The poorest suffer the most. In Mumbai, densely packed slums can be between 5°C and 8°C hotter than neighbouring residential areas. Researchers estimate that the city's econ-

omy stands to lose \$6bn annually from excessive rain and flooding by 2050.

Many Indian cities have disaster-management protocols and "heat-action plans" to deal with extreme weather. These revolve around providing flood shelters or cooling stations. But they tackle only symptoms. Robust public-transport systems and affordable housing are better tools for dealing with causes. So are greenery and building design. India's building code should shift its focus towards insula-

tion and ventilation.

In 2022 economists at Kyushu University in Japan found that despite poor conditions and the absence of basic services, slum residents in Mumbai were happier and more satisfied with their lives than rural populations in the city's hinterlands, owing to higher social trust and better wages. So long as India's cities offer the hope of a better life, however slim, they will continue to grow—whether they are prepared for it or not. ■

BANYAN

Anarchist squint

James C. Scott shed light on an ungovernable part of the world

THE SEAPORTS of Asia are synonymous with globalisation, trade and integration. The ships which go through the hubs of Shanghai, Busan and Singapore connect the world's producers and consumers at speeds which would once have been unfathomable. They are the sinews of the modern world.

But the continent's highlands, far from the distant centres of political and financial power, are a different story. Many have resisted the power of governments, officialdom and the formal economy for centuries. James C. Scott, an American anthropologist and political scientist, who died on July 19th at the age of 87, helped illuminate the lawless history of what he called Zomia, a region spread across upland South-East Asia, encompassing much of Thailand, Laos, Vietnam and Myanmar, which spills into China's south-western and India's north-eastern corners. Mr Scott said that he saw the world not with an anarchist lens, but with an anarchist squint. He was not a doctrinaire opponent of government in all its forms, but took an interest in the way state power was established and how it was resisted.

On both the political left and right, readers of a libertarian bent (your guest columnist among them) have consumed his idiosyncratic work over decades. "Seeing Like a State", his anthology from 1998 on the unintended effects of government intervention in a variety of fields, is a particular favourite. "The Art of Not Being Governed" (2009) is a distillation of his work studying the highlands of South-East Asia. "Against the Grain" (2017) explored the way agriculture was used as a tool of control.

Zomia was a natural fit for Mr Scott's squint. He made the case that over centuries the lifestyles and social structures

of the region's residents had been shaped by evading the power of the states—whether Chinese, Burmese or Thai—which hemmed them in. Their sustenance relied on "escape crops" which grew quickly, were tolerant of poor soil and did not require consistent labour.

Mr Scott believed that Zomia was becoming less unruly. But the region's lawlessness persists in different ways. Consider Dali, in Yunnan province in China, a relatively easy-going corner of an increasingly authoritarian country. A government campaign to eradicate the local supply of cannabis and magic mushrooms has blunted the city's vibe, but the products are impossible to wipe out.

The lawlessness can be more malign. Khun Sa, a drug kingpin and military commander from Myanmar's hilly Shan state, exercised control over as much as half the world's supply of heroin during the 1980s. The warlord was a product of one of the region's defeated military forces, beginning his ignominious career with the Chinese Kuomintang who had fled after their defeat by Mao Zedong's com-

munists. In a better-known part of the world, Khun Sa would have been as famous as Pablo Escobar. Much of Myanmar's civil war is being fought around these borderlands.

Some of the region's anarchic nature has been formalised, in strange ways. The hill peoples of South-East Asia from centuries past would find the neon-lit, bustling Special Economic Zones (SEZs) in northern Laos and eastern Myanmar quite unfamiliar. But the zones are a bizarre hybrid of the region's historical disorder and the growing reach of official power. Pumping billions of dollars from China into the SEZs has been encouraged under the Belt and Road Initiative. The money has brought corruption, but none of the safety usually associated with state power. The SEZs are hubs of gambling, money-laundering, and trafficking in humans and wildlife.

They are also home to the scam compounds which have blossomed in recent years. Victims, lured from across the world with the promise of work and other opportunities, are instead put to work in a form of modern slavery, where they craft online scams to swindle people globally. Zomia's lawlessness touches the rest of the world as never before.

Mr Scott was right that the process of Zomia being subsumed by the countries around it is well under way. Revolutions in transport and communications technology made that transformation inevitable. But he also made clear that the ungovernable hills and strait-laced valleys were complements to one another, rather than opposing forces. Each had something that the other wanted: whether something benign, or something destructive. To understand that, the anarchist squint will remain a very useful tool, and is Mr Scott's lasting legacy.



China



Deep-sea mining

Sunken treasures

BEIJING

China is itching to mine the ocean floor for critical minerals

SCATTERED ACROSS the ocean floor are trillions of lumps of nickel, copper, cobalt and manganese. Companies have long wanted to mine them: these “critical minerals” are needed in vast quantities to electrify the global economy and cut dependence on fossil fuels. But the International Seabed Authority (ISA), a UN body, is still figuring out how mining should be regulated. Some environmental groups want an outright ban. Supporters and critics of deep-sea mining are hashing out these issues at an ISA meeting in Jamaica between July 29th and August 2nd. Of the 160-odd countries participating, few have more interest in the outcome than China.

Demand for critical minerals might more than double by 2040 compared with 2020, according to the International Energy Agency, a forecaster. China is a big reason why. It makes most of the world’s solar panels, electric cars and batteries, all of

which require such minerals. Last year clean-energy industries accounted for 40% of the growth of its GDP, according to the Centre for Research on Energy and Clean Air, a think-tank in Finland. But China has to import many of the critical minerals it uses. Its manganese comes from South Africa, Gabon and Australia. Most of its cobalt comes from the Democratic Republic of Congo. Its nickel largely comes from the Philippines and Indonesia.

These dependencies worry China’s leaders. They fear supplies could be disrupted by political turmoil or pressure

from rivals like America. The scramble for critical minerals is “a new front for strategic competition among global powers”, says China’s national intelligence agency. Officials rank critical metals alongside oil and gas in their importance to China’s future. Deep-sea mining promises a secure supply. And it would occur in international waters, beyond other countries’ sovereign authority. In 2016 Xi Jinping, China’s leader, said his country must get its hands on the “hidden treasures” of the ocean.

To that end, China has spent years building up influence at the ISA, which has authority over the seabed in international waters under the UN Convention on the Law of the Sea (UNCLOS). The ISA is largely financed by its member countries, and China gives it more money than any other donor. In 2020 it also gave the ISA a training facility in Qingdao, a port city in eastern China. At ISA meetings last year, some countries tried to introduce a moratorium on deep-sea mining. They failed, in large part because of pressure from China. Its goal is to create a permissive mining regime that brooks no interference from other countries, says Isaac Kardon, of the Carnegie Endowment for International Peace, a think-tank in Washington.

In total the ISA has issued 31 licences allowing the holders to explore for minerals

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▶ in preparation for commercial operations. Three Chinese miners—China Ocean Mineral R&D Association, China Minmetals and Beijing Pioneer Hi-Tech Development—hold five between them, more than any other country's miners. They are itching to start operations. Three of the Chinese licences cover patches of seabed in the Clarion-Clipperton Zone, an enormous region in the eastern Pacific Ocean that holds quantities of critical minerals roughly equivalent to all terrestrial reserves. The other two are in the western Pacific and the Indian Ocean.

Companies typically mine in order to make money, but China's also have grander concerns. Take China Minmetals, a state-run giant that has an exploration licence for about 7.3m hectares of ocean floor (an area bigger than Sri Lanka). In March its chairman vowed to secure mineral supplies in order to help "rejuvenate the Chinese nation". Chinese companies must expand operations until they "cannot be dislodged" from global supply chains, he said.

Deep-sea mining involves sending a large robot to the seabed to Hoover up lumps of metal, known as nodules. A support ship then sucks up the nodules through a pipe. All this is tricky because of the low visibility and high pressure at the bottom of the sea. China's technology is not quite cutting-edge. But it is getting there. In July a team from Shanghai Jiao Tong University sent a test robot (pictured on previous page) to depths of below 4,000 metres to collect 200kg of material. The robot was largely built from Chinese-made components, "smashing international monopolies", said China's state media.

If commercial mining gets going, Chinese companies might well end up leading the industry, says Cory Combs of Trivium, a consultancy. China can build ships and robots faster than any other country. Its officials have a history of lavishing subsidies on emerging industries. And its deep-sea miners have a giant domestic market for the riches they bring to the surface.

All this worries environmental groups. The deep-ocean floor supports thousands of unique species, from microbes to sponges. Even with strict regulation and responsible operators, mining robots are likely to cause damage. They can kill the organisms they drive over; the plumes of sediment they create can kill more. Chinese miners, moreover, do not have a record of being responsible even on land, where their activities are easier to monitor.

China's rivals are uneasy too, and not just for the sake of the sponges. One worry is that deep-sea mining could act as cover for less peaceful activities. Surveys of the deep ocean would help China's naval submarines navigate. In 2021 a research vessel sent by China Minmetals took an unexplained detour from its exploration zone. It

spent five days in the waters near Hawaii, where America has big military bases.

Western countries' biggest concern, though, is about who controls the supply chains of clean-energy industries. China already has a substantial advantage. Deep-sea mining might cement it. America, meanwhile, is shut out of ISA discussions as it has not ratified UNCLOS. In March a group of retired American officials wrote to the Senate demanding that it ratify the treaty. Chinese miners had "taken advantage of our absence", they said.

Such worries are a boon, however, to the Western businesses arguing for deep-sea mining. One of these is The Metals Company, a Canadian outfit that hopes to apply for a commercial-mining licence from the ISA later this year. It gets a warm reception in Washington these days, says Gerard Barron, its founder. "People have latched on to the fact that China is going to potentially dominate this industry," he says. "It's a very motivating driver." ■

The Olympics

Flipping talented

Which Olympic sports is China good at?

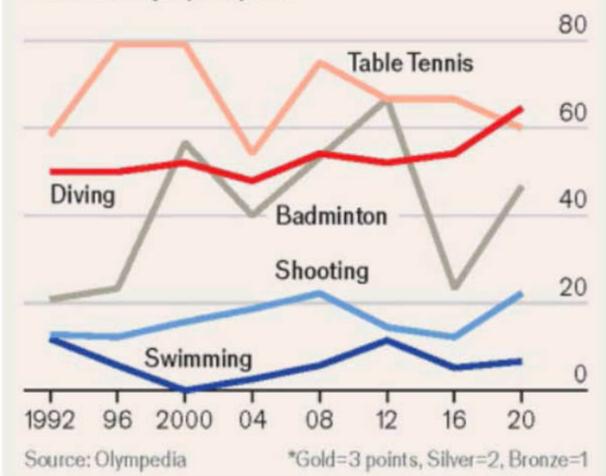
ON JULY 29TH Lian Junjie and Yang Hao (pictured) leapt off a ten-metre-high platform, twisting and flipping in near-perfect synchronisation. Before the Olympic judges even posted their marks, Chinese fans celebrated. Then it became official: the pair had won gold, beating divers from Britain. China has won 50 gold medals in the sport of diving over the years, more than any other country.



Twice as nice

Shuttlecocks and somersaults

China, % of medal points* in selected Olympic sports



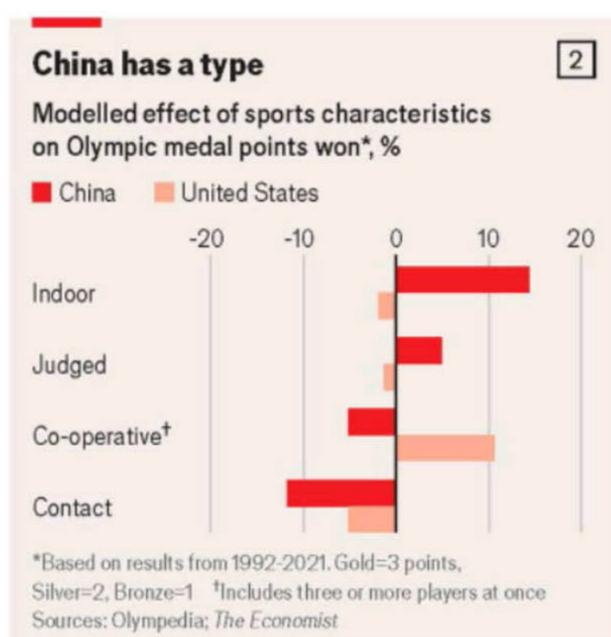
Olympic medals are a source of prestige for China. The country boycotted the games for decades because of the participation of Taiwan, which China claims. When China returned in the 1980s it won fewer medals than its size seemed to warrant. But as China grew richer, the state poured resources into the training of athletes. Some have also been accused of doping. The upshot is that China's share of gold medals at the summer games has risen from 2% in 1988 to 11% in 2021.

China's success tends to be concentrated in a handful of disciplines. Using statistics compiled by Olympedia, a database of results, we analysed the country's performance at the summer games from 1992 to 2021. We assigned points for each medal handed out (three for gold, two for silver and one for bronze), then calculated China's share of these points, or dominance score, in each sport. A score of one means China won every medal in a sport; a score of zero indicates that it won none.

China dominates sports such as table tennis and badminton (see chart 1), winning over half of the Olympic medals ever awarded in the former. In diving China hopes to win most, if not all, of the eight golds on offer this year. Elsewhere in the pool, though, Chinese athletes are less buoyant. The country's swimming team, which is the focus of doping allegations, won just 7% of medal points in 2021.

We wondered if the sports that China was good at had anything in common. To find out, we sorted events into various (non-exclusive) categories according to their characteristics, then built a model to see if these categories could explain China's performance. Chart 2 shows how China's dominance score moves up or down based on a sport's inclusion in a category, all else being equal. (We excluded sports introduced since 2016 for lack of data.)

China does better in sports played indoors compared with those played outside. It is bad at sports that involve physical contact between competitors and at big-team sports (three players or more in our



definition). China does well in events that are scored by judges. We expected the results to show that it focuses on sports where there are lots of medals up for grabs—the better to increase its total. But its dominance score actually drops by 0.08 if a sport features more than five events.

America, in contrast, excels at team sports. Where a sport is played or if it is judged has no statistically significant effect on the performance of its athletes. America's wins are also spread more widely. This may reflect differences in the countries' sporting regimes. China relies on a training system that throws the state's weight behind a few elite athletes. America has a more diffuse system which encourages participation in a wide range of sports.

After five days of competition, China has won more gold medals than America. But that lead may not last. ■

The economy

Slowing down, trading up

To lift spending, China offers consumers bigger subsidies for better stuff

EVERYWHERE YOU look, the world's politicians face tough economic choices. In many countries, they must raise taxes, cut spending or put up with high interest rates to keep inflation in check and make room for investment in the future. China is different. In the world's second-biggest economy, inflation is too low, investment is excessive and interest rates are falling. The government's most urgent economic task is to encourage citizens to loosen their belts, not tighten them.

"We should focus on boosting consumption to expand domestic demand," the Communist Party's Politburo said on July 30th. It is right. The government's economic-growth target for this year is

"around" 5%. To meet it, demand and production must expand in tandem. Consumption accounted for most of the necessary increase in spending last year, as households returned to eating out and travelling after the pandemic. Their spending was also strong in the first three months of this year. But it has since begun to flag, putting the growth target in doubt.

Consumer confidence is low. Retail sales grew by only 2% in June, compared with a year earlier, even before adjusting for inflation. Sales of cosmetics and clothing fell. A survey by China's central bank in April showed that over 60% of city-dwellers want to increase the amount in their savings accounts. Less than a quarter want to consume more.

To change their minds, the government has expanded a programme introduced in March. The scheme provides subsidies to households that renovate their homes and scrap old goods for shinier, greener replacements. Buyers of new electric cars will receive up to 20,000 yuan (\$2,800). Other goods, including refrigerators and televisions, will attract subsidies of up to 2,000 yuan. The money for the scheme, which will amount to about 150bn yuan (\$20bn), will come from long-term bonds sold this year by the central government. That will spare debt-ridden local governments an additional financial burden.

At a press conference for the policy, Xu Xingfeng of the Ministry of Commerce referred to cars, household appliances, home furnishings and catering as the "four guardian kings" of traditional consumption, a reference to the four protectors of the world in Buddhism. He urged local governments to promote energy-saving appliances, such as water-efficient dishwashers, and more sophisticated home products, such as "smart" toilets. The Buddha, of course, taught that desire for material things was the source of suffering. But he never owned a smart toilet.

Will the scheme make a difference? The amount earmarked by the central government is the equivalent of only 0.3% of the country's annual retail sales (although it is meant to be spent in a shorter interval). Even if it succeeds in the near term, it may cannibalise later sales. America's cash-for-clunkers programme, introduced in 2009 during the global financial crisis, prompted 360,000 extra car purchases in two months, according to Atif Mian of Princeton University and Amir Sufi of the University of Chicago. But because subsequent sales were correspondingly weak, the net effect was almost zero by March 2010.

Such schemes aim to prise open wallets. Another approach to raising consumption is to fatten those wallets. The Politburo also promised to "increase residents' income through multiple channels", without specifying how. Households' big-

gest source of income is wages. But Goldman Sachs, a bank, estimates that urban wages grew by only 2.7% year-on-year in the second quarter, compared with growth of 5.6% in the first.

Households can also earn income from their assets. For most Chinese, their biggest asset is housing. A survey in 2019 by the central bank showed that flats and other residential property accounted for 60% of the average city-dweller's wealth. The ongoing decline in China's house prices will, therefore, have damaged consumer morale. But because few households rent out their flats, even when they own several of them, the property slump may have inflicted surprisingly little harm on their cashflow, points out Adam Wolfe of Absolute Strategy Research, an advisory firm.

What about households' other assets? Building on the central bank's survey, Mr Wolfe has estimated the average city-dweller's holdings of stocks, bonds, deposits and other financial assets. He calculates that the yield on this portfolio (including dividends and interest payments) has halved since 2019 (see chart). This is partly because regulators have cracked down on the riskier, more rewarding, products offered by shadow banks. It is also because households' eagerness to save, amassing deposits and bonds, has reduced the return to doing so. The decline in yields is, then, a consequence of weak consumption. And by eroding household income, it could also be a further cause of it.

In steering the economy, China's rulers have powers and privileges other politicians can only dream of. They face no political opposition. The central bank is subservient. The government owns most of the commercial banks and many other firms, too. Yet China's leaders have failed over the past two decades to rebalance the economy decisively towards consumption. And they will probably fail over the rest of this year to raise household spending enough to meet their growth target. Perhaps it is time for them to trade in their old economic policies for new ones. ■

Disappointing returns

China, yield on household financial assets*, %



*Includes shadow-banking products
Source: Absolute Strategy Research

CHAGUAN

How China buries bad news

A revealing attempt to forget a terrible plane crash



ONLY A FEW fire-blackened branches and tree stumps, half hidden by young green ferns, betray the horrors that visited this valley in southern China a little over two years ago. No shrine or memorial stone marks the place where 132 people on a domestic flight from Kunming to Guangzhou lost their lives. They died in the early afternoon of March 21st 2022 when their China Eastern Boeing 737 hit the ground in a near-vertical nosedive, travelling at close to the speed of sound.

An unmarked dirt road leads to the crash site in the southern province of Guangxi, winding through citrus orchards and eucalyptus groves from the nearest village, Molang. For a while the steep-sided crater was sealed behind a wall of blue metal panels. Now farmers on motorcycles pass through openings to reach their fields. Controls remain in place, though. When Chaguan walked to the crater on a recent afternoon he was soon accosted by the deputy head of the village Communist Party committee, who like most locals bears the family name Mo. "We pay great attention to state security here," Mr Mo explained, while filming your columnist with his phone. Villagers had told him about the arrival of a foreigner, heeding government instructions to report "people from elsewhere, spies and so on". Locals would refuse to say anything about the plane crash, he added.

To this day Chinese authorities have proposed no cause for the disaster. Officials have confirmed that no problems were logged with the plane, its crew or the weather before take-off. Images of the doomed airliner, caught by a security camera near the crash site, show it hurtling earthwards in one piece. Though Boeing's reputation as a manufacturer is taking a battering just now, no safety alerts have been issued by China Eastern or Boeing about the crash in 2022. These would have flagged things that other carriers need to know about. To aviation professionals, the only remaining explanation is "intentional pilot action". The same professionals point to a telltale surge in Chinese efforts to monitor pilot mental health, including sessions on mental illness at an Asia-Pacific aviation-safety summit in August to be co-hosted in Beijing by the Civil Aviation Administration of China.

Pilot suicide has caused tragedies before, as when a co-pilot for

Germanwings, a European airline, locked his captain out of the cockpit and flew into a mountain in 2015, killing 150 people. Yet from the start Chinese officials have scolded those asking whether China Eastern flight MU5735 crashed deliberately, calling such inquiries "rumours" which "seriously misled the public". Alas, officials decline to discuss other causes. Instead, China has sought to bury the tragedy in a hole of forgetting. Immediately after the crash online nationalists denounced reporters who interviewed victims' families. Since then, neither relatives nor their lawyers have waged public campaigns to hold state-owned China Eastern to account. Though international conventions require annual updates on air-crash investigations, China's first- and second-anniversary bulletins were terse to the point of insult. The crash is "very complicated", officials say, their work needs more time.

Chaguan did not travel to Guangxi to gawp at a disaster scene. His aim was to explore how officially mandated amnesia works on the ground. The question is worth asking because imposed forgetting is becoming more brazen in Xi Jinping's China. Party bosses have always resorted to cover-ups when things go wrong. But in the first decades of the reform era, as China embraced capitalism and opened to the world, media, lawyers, civil-society groups and even some officials were more willing to press the government for explanations. After a high-speed train crash killed 40 near the city of Wenzhou in 2011, railway officials called off the search for survivors after eight hours and buried some train carriages in a pit. They reversed course amid an outcry, including on-air condemnations by state-television hosts. After 21 hours of searching, a two-year-old girl was found alive. The buried carriages were dug up.

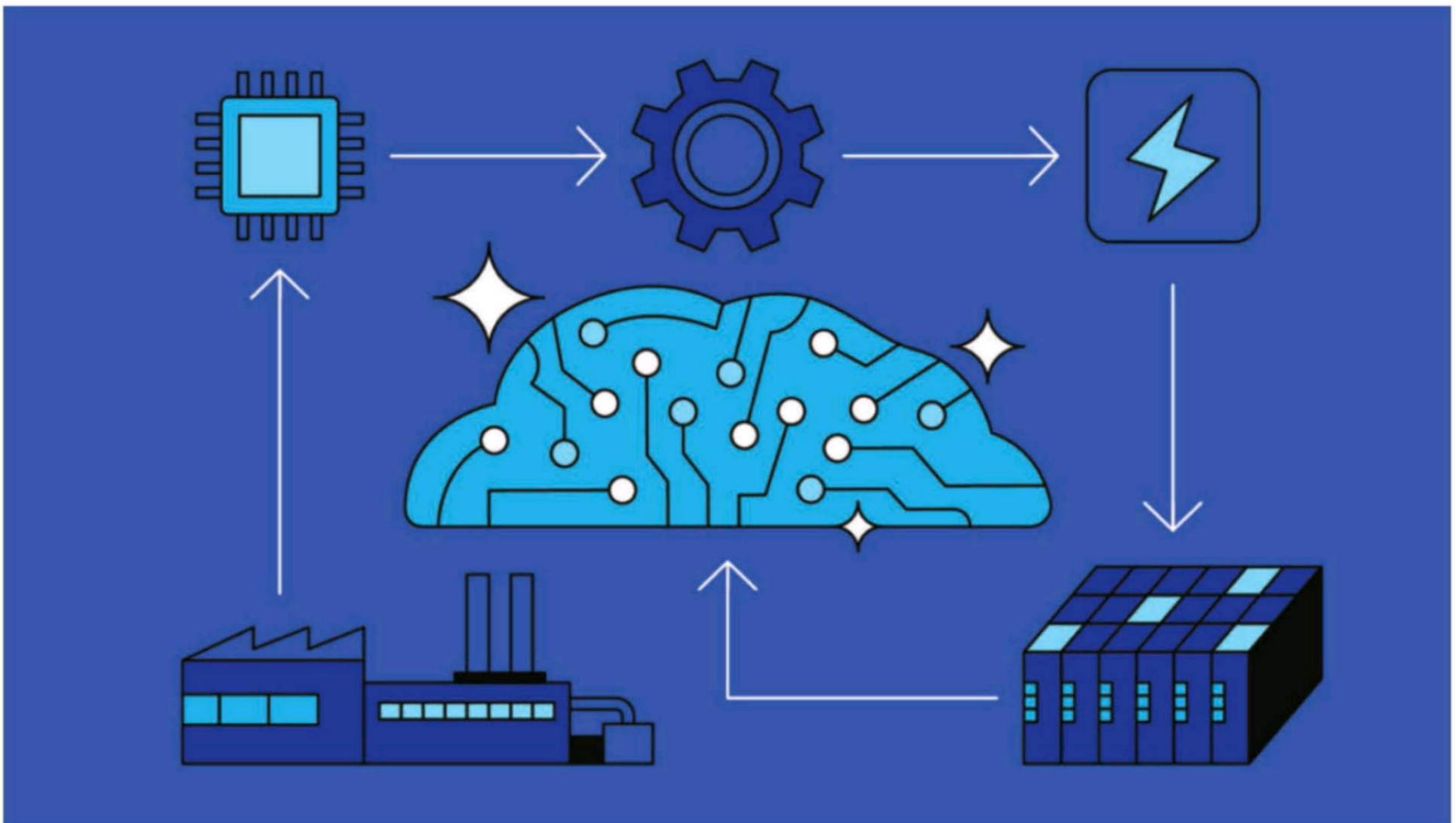
Under Mr Xi, though, state media face far harsher political controls and censorship, and the party dares to consign even large catastrophes to a memory hole. After China's tight pandemic restrictions were suddenly abandoned in late 2022, many doctors say they were banned from recording covid-19 as a cause of death. Later, to thwart independent researchers trying to estimate excess deaths from the pandemic's exit wave, national authorities stopped reporting cremation statistics.

Autocracy, technology and cynicism at work

Still, the evidence from Molang is that controls are tight but not total. "In China it's not like the West, you always insist on freedom, freedom, freedom," grumbled Mr Mo, escorting his foreign visitor to the village. "Here we need to heed instructions from the security department." Nearing a group of villagers playing cards, he added confidently: "When they see me, they won't tell you anything." He was only half right. Though many locals were silent, some were ready to talk. An older villager recalled rushing to help with the crash and watching bereaved relatives visiting Molang. With Mr Mo at his side, that villager agreed that the lack of a physical monument was odd, adding: "If that many people had died in a war, there would be a memorial." Asked why one has not been built, he replied, "How should I put it? I'm just a simple farmer."

Large disasters are not truly forgotten and leaders know it. They impose silence to signal that a subject is off-limits. Today more citizens have something to lose by disobeying. If they discuss banned topics online they risk being cut off from the all-in-one messaging, shopping and financial apps that are essential to life in China. After that, time is on the party's side. Vegetation already covers the red-earth slopes of Molang's crash site. Before long there will be nothing at all to see. ■

Business



Artificial intelligence

Feeding the machine

The AI supply chain is growing rapidly. What could go wrong?

“THE RISK of under-investing is dramatically greater than the risk of over-investing,” said Sundar Pichai, the boss of Alphabet, which owns Google, on a recent earnings call. He, like lots of executives nowadays, was talking about artificial intelligence (AI). More specifically, he was talking about building AI data centres to serve the customers of the tech giant’s cloud-computing arm. The sums involved are eye-popping. Alphabet’s capital spending is expected to grow by about half this year, to \$48bn. Much of that will be spent on AI-related gear.

Mr Pichai is in good company. During an earnings call on July 30th Satya Nadella, the chief executive of Microsoft, also reaffirmed his plans to spend big on AI. Alphabet and Microsoft, along with Amazon and Meta, will together spend \$104bn building AI data centres this year, estimates New Street Research, a firm of analysts. Add in spending by smaller tech firms and companies in other industries and the total AI data-centre binge between

2024 and 2027 could reach \$1.4trn.

The scale of this investment, and uncertainty over if and when it will pay off, is giving shareholders the jitters. The day after Alphabet’s results the NASDAQ, a tech-heavy index, fell by 4%, the biggest one-day drop since October 2022. Microsoft’s share price also fell after its earnings release.

For now, the tech giants show little inclination to pare back their investments, as Mr Pichai’s remarks show. That is good news for the myriad suppliers that are benefiting from the boom. Nvidia, a supplier of AI chips that in June briefly became the

world’s most valuable company, has grabbed most of the headlines. But the AI supply chain is far more sprawling. It spans hundreds of firms, from Taiwanese server manufacturers and Swiss engineering outfits to American power utilities. Many have seen a surge in demand since the launch of ChatGPT in 2022, and are themselves investing accordingly. In time, supply bottlenecks or waning demand could leave those companies over-extended.

AI investment can be split into two. Half of it goes to chipmakers, with Nvidia the main beneficiary. The rest is spent on makers of equipment that keeps the chips whirring, ranging from networking gear to cooling systems. To assess the goings-on along the AI supply chain, *The Economist* has examined a basket of 60-odd such companies. Since the start of 2023 the mean share price of firms in our universe has risen by 103%, compared with a 42% increase in the S&P 500 index of American stocks (see chart 1 on the next page). Their expected sales for 2025 have climbed by 14%, on average. That compares with a 1% increase across non-financial firms, excluding tech companies, in the S&P 500.

The biggest gainers were chipmakers and server manufacturers (see chart 2). Nvidia accounted for almost a third of the rise in the group’s expected sales. It is forecast to sell \$105bn of AI chips and related equipment this year, up from \$48bn in its latest fiscal year. AMD, its nearest rival, will

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probably sell about \$12bn of data-centre chips this year, up from \$7bn. In June Broadcom, another chipmaker, said that its quarterly AI revenues jumped by 280%, year on year, to \$3.1bn. It helps customers, including cloud providers, design their own chips, and also sells networking equipment. On July 25th SK Hynix, one more chipmaker, said it expects demand for its advanced memory chips to more than double in the next year.

Companies that make servers are also raking it in. Both Dell and Hewlett Packard Enterprise (HPE) said in their most recent earnings calls that sales of AI servers doubled in the past quarter. Foxconn, a Taiwanese manufacturer that assembles lots of Apple's iPhones, also has a server business. In May it said its AI sales had tripled over the past year.

Other firms are seeing interest spike, even if new sales have not yet materialised. Eaton, a maker of industrial machinery, said that in the past year it saw more than a four-fold increase in customer enquiries in America related to its AI data-centre products. AI servers can require up to ten times more power than conventional ones. Earl Austin Junior, the boss of Quanta Services, a firm that builds renewable-power and transmission equipment, recently admitted that the surge in demand for its data-centre business had "caught me off guard a little bit". Vertiv, which sells cooling systems used in data centres, noted in April that its pipeline of AI projects more than doubled within two months.

All this interest is setting off a further frenzy of investment. This year around two-thirds of firms in our sample are expected to raise their capital expenditure, relative to sales, above their five-year averages. Many companies in the supply chain are building new factories. They include Wiwynn, a Taiwanese server-maker, Supermicro, an American one, and Lumentum, an American seller of advanced networking cables. Many are also spending more on research and development.



Some companies are investing through acquisitions. This month AMD said it was buying Silo AI, a startup, to boost its AI capabilities. In January HPE announced it would spend \$14bn to acquire Juniper Networks, which makes networking gear. In December Vertiv announced its purchase of CoolTera, a liquid-cooling specialist. It hopes this will help it scale up its production of liquid-cooling technology 45-fold.

Just as the spending ramps up, though, the threats to the AI supply chain are building. One problem is its heavy reliance on Nvidia. Baron Fung, of Dell'Oro Group, a research firm, notes that when Nvidia went from launching a new chip every two years to every year, the entire supply chain had to scramble to build new production lines and meet accelerated timelines. Future sales for lots of firms in the AI supply chain are predicated on keeping the world's most valuable chipmaker happy.

Another threat stems from supply bottlenecks, most notably in the availability of power. An analysis by Bernstein, a broker, looks at a scenario in which by 2030 AI tools are used roughly as much as Google search is today. That would raise the growth in power demand in America to 7% a year, from 0.2% between 2010 and 2022. It would be hard to build that much power capacity swiftly. Stephen Byrd of Morgan Stanley, a bank, notes that in California, where many AI data centres could be built, it takes six to ten years to get connected to the grid.

Some companies are already trying to fill the gaps by providing off-grid power. In March Talen Energy, a power company, sold Amazon a data centre connected to a nuclear-power plant for \$650m. CoreWeave, a small AI cloud provider, recently struck a deal with Bloom Energy, a fuel-cell maker, to produce on-site power. Others are repurposing sites such as bitcoin-mining locations that already have grid access and power infrastructure. Still, the energy needs for AI are so vast that the risk of a power shortage remains.

The biggest threat to the AI supply chain would come from waning demand. In June Goldman Sachs, a bank, and Sequoia, a venture-capital firm, published reports questioning the benefits of current generative-AI tools, and—by extension—the wisdom of the cloud-computing giants' spending bonanza. If AI profits remain elusive, those giants could cut investments, leaving the supply chain exposed.

The build-out of factories has brought higher fixed costs. Across our sample of firms the median spending on property, plants and equipment is expected to jump by 14% between 2023 and 2025. Some investments may start to look suspect if demand is slow to materialise. The price tag on HPE's purchase of Juniper Networks was two-thirds of the acquirer's market value when it was announced in January.

Even after the recent wobbles, market expectations remain bullish. For our sample of firms the median price-to-earnings ratio, a measure of how investors value profits, has climbed by nine percentage points since the start of 2023. If such expectations are to be met, AI tools need to improve quickly, and businesses need to adopt them en masse. For the many companies along the AI supply chain, the stakes are getting uncomfortably high. ■

Business in India

Two wheels good

MUMBAI

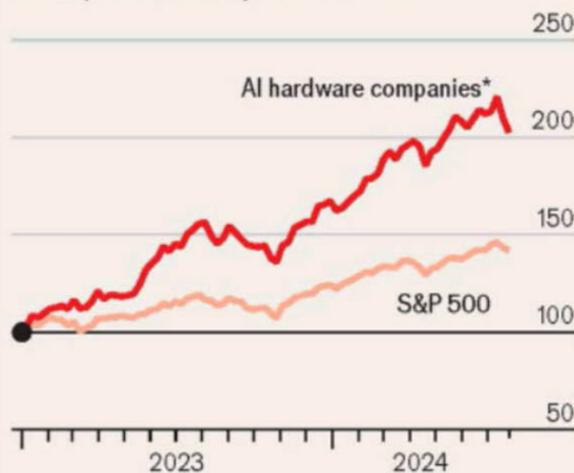
India's electric-scooter champion goes public

TWO-WHEELED VEHICLES are an integral part of life in India. They whizz over the country's broken, clogged roads, carrying families and loads that would fill a small lorry. India manufactures about 20m of them each year, making it one of the world's leading producers. It is fitting, then, that the country's largest initial public offering (IPO) so far this year is for an electric-scooter company. On August 2nd Ola Electric plans to sell around \$730m of shares at a price that will value the firm at roughly \$4bn.

Ola Electric has been on a fast but bumpy ride since it began churning out battery-powered scooters in 2021. Mechanical troubles early on led to fires and breakdowns. The company has now resolved those manufacturing problems, and is the leading maker of the vehicles in India. Yet it lost \$190m in its most recent fiscal year, 8% more (in rupees) than its loss in the previous year. It sold 330,000 scooters at an average price of \$1,800—and an average loss of \$573. Although that is an improve- ▶▶

March of the machines

Share prices, January 1st 2023=100



*Unweighted index of 60 selected companies
Sources: Bloomberg; The Economist

ment, of sorts, on the 156,000 scooters sold at an average loss in excess of \$1,100 in the previous year, profits appear to be some distance away.

The \$4bn valuation at which the company will list is significantly below the \$5.4bn valuation it received in September during its last venture-funding round. Bhavish Aggarwal, Ola Electric's founder, claimed, implausibly, that he wanted to make sure that the IPO was priced "attractively for the entire investor community in India". The company's reduced valuation will be disappointing for some recent investors, but is hardly a rarity in India these days. Valuations among Indian startups have plummeted owing to rising interest rates. Ola Cabs, the ride-hailing service from which Ola Electric was spun off, was valued at \$7.3bn in 2021. It has since suspended its planned listing, sacked employees and closed overseas operations.

Ola Electric, though, is raising money to do more than just keep its engine running. Of the funds it raises, \$191m will be used for research and development and \$147m for capital equipment, primarily to bring the production of batteries in-house. A planned electric car has been put on hold, but new electric motorcycles are scheduled to be introduced in 2025.

Analysts are bullish about the outlook for two-wheelers in India. According to one presentation accompanying Ola Electric's offering, annual sales in the country are expected to rise to 13m units by 2028, up from around 700,000 today. But pot holes still lie ahead. In recent months the government has cut subsidies for electric vehicles, leading to a slowdown in growth. And even if electric scooters continue to spread across the country, there will be stiff competition from domestic rivals such as TVS and Bajaj, which have excellent reputations and deep pockets.

On the bright side, one usual group of competitors—Chinese companies—has struggled to keep up with domestic firms. Part of the explanation may be regulations in the Chinese market which, for perhaps understandable reasons, cap the speed at which its two-wheelers can travel. India has no such restraints. Ola Electric's two-wheelers can reach a zippy 120kph. They have a range of 150km, to boot.

For now, it looks as though investors in India's public markets are happy to go along with Ola Electric for a ride. Interest in the IPO is reportedly high. In recent days, in anticipation of the listing, videos have circulated on social media of partially submerged Olas speeding through flooded Indian streets. That is an impressive achievement—though, given the brevity of the clips, it is unclear whether the riders successfully make it to their destinations. Investors in the scooter-maker may be taking a similar plunge. ■

Smartphones

Screened out

Dumb phones are making a comeback

IT IS HARD to imagine life without a smartphone these days. Leave yours at home and you may find yourself lost, moneyless and severed from social contact. Nine in ten American adults own one, according to Pew Research Centre. They spend 3 hours and 45 minutes on them a day, on average, reckons GWI, a firm of analysts. New versions souped up with artificial intelligence may be even harder to put down.

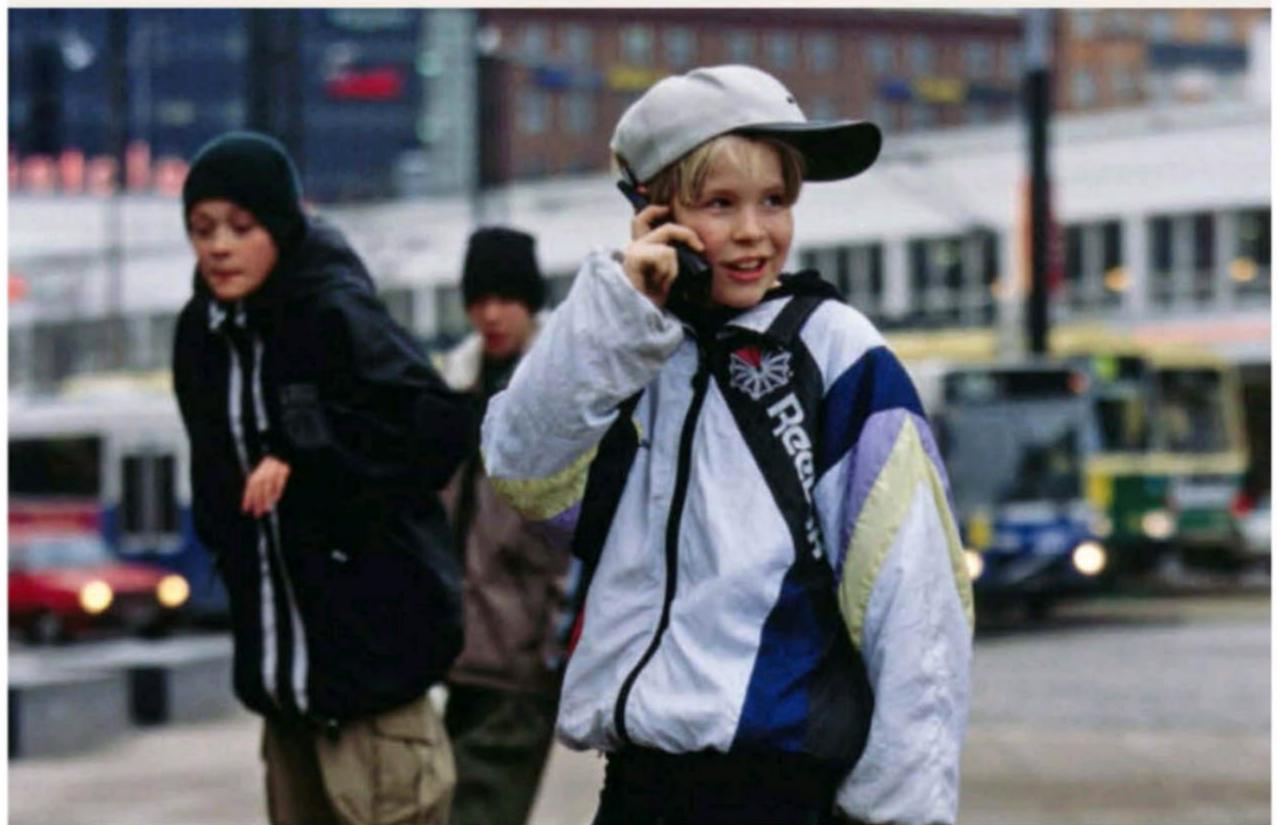
Yet a market is also emerging for phones that are deliberately pea-brained. These dumb phones—confusingly called "feature phones"—account for just 2% of phone sales in America. But demand is growing. In 2016 HMD, a Finnish firm, bought the rights to relaunch the devices of Nokia, whose basic phones once reigned supreme. It says it is now selling "tens of thousands" of flip-phones a month in America. In May it re-released the Nokia 3210, a mainstay of many millennials' teenage years, in Europe. It even has Snake, a classic mobile game.

Dumb phones today do not merely replicate those of the past, though. Start-ups offer minimalist devices of their own. One example is the Light Phone, which is shaped like an iPod and has an e-ink screen like a Kindle. It also allows users to add optional "tools" including a podcast-player and a directions app.

What explains the return of the dumb phone? One factor is anxiety over the impact of smartphones—and social-media apps in particular—on young people's mental health. That is why Eton, a posh British school, announced in July that it would bar its future prime ministers from bringing smartphones to school, and would provide them with Nokia phones instead.

But plenty of grownups are also choosing dumb phones of their own accord. Jose Briones, who moderates a forum dedicated to dumb phones on Reddit, a social-media site, switched to the Light Phone after growing alarmed at his soaring screen-time tally. Like many neophytes, he still keeps a smartphone for situations such as travelling abroad. Other smartphone addicts are instead opting to dumb down their devices, either by deleting apps or downloading ones that control screen time, of which there are a growing number.

Forswearing the supercharged connectivity of a smartphone can lead to jitters at first. Christina Dinur, another dumb-phone convert, remembers wondering what to do with herself when waiting in a queue without her smartphone. But, she says, she "settled into it really quickly". For some, it seems, a dumb phone can be a smart choice.



Blast from the past

Chipmaking

Semi-successful

Samsung's profits are surging, but its technology is lagging behind

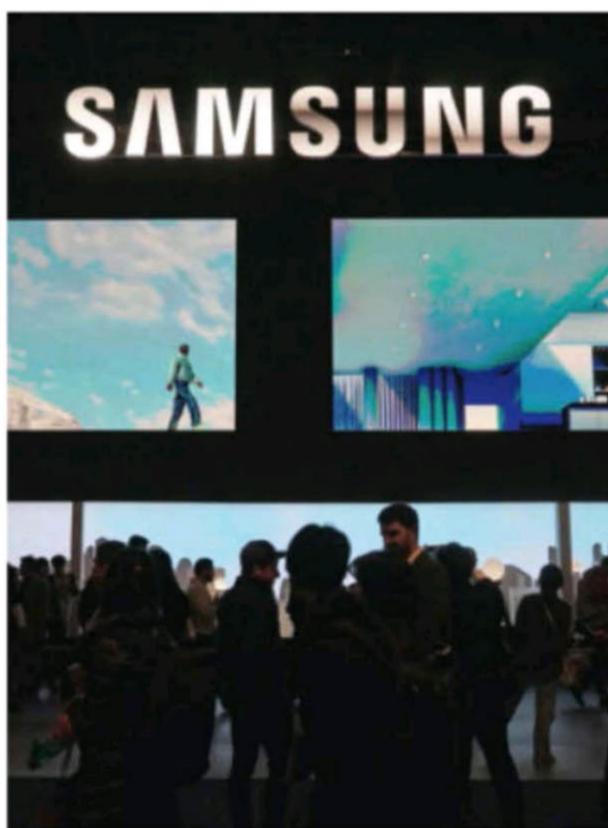
SAMSUNG ELECTRONICS, South Korea's most valuable company, is the archetype of vertical integration. The smartphones and other consumer electronics it is best known for accounted for about half of its revenue and a quarter of its operating profit in the period from April to June. The rest came from the components that go into such devices—including the semiconductors that run them.

On July 31st the company reported that its operating profit in the most recent quarter was up 16-fold, year on year, thanks to growth in its chip business. Demand is rocketing as tech giants such as Microsoft and Alphabet rush to build data centres to support their artificial-intelligence (AI) ambitions. Samsung's share price rose 4% on the day. Yet a single bumper quarter cannot obscure the company's deeper challenges. Most worrying is that it has been losing ground to rival chipmakers. Global technology stocks are up by 82% since the start of 2023. Samsung's value has risen by just half that.

The South Korean giant is struggling to compete at the cutting-edge of both logic chips (which process information) and memory chips (which store it). In the first category, it has fallen further behind TSMC, a Taiwanese foundry that manufactures semiconductors on behalf of companies such as Nvidia, the leading supplier of AI chips. Between the first quarters of 2019 and 2024 the Taiwanese firm increased its share of the global chip-foundry business from 48% to 61%, according to Trendforce, a research firm. Samsung's share fell from 19% to 11% (see chart).

Samsung's position as the global leader in memory chips is also under threat. There it is being menaced by SK Hynix, a South Korean firm spun off from Hyundai in 2001 that has become the world's biggest producer of high-bandwidth memory (HBM) chips. These stack memory chips together, increasing speed and decreasing power consumption, which makes them especially useful in AI applications. In HBM3, the most advanced type currently available, SK Hynix is thought to hold a market share of 90%. Samsung's memory chips, meanwhile, reportedly suffer from low production yields (the proportion of chips that actually work). Buyers are said to grouse about poor power efficiency.

Because of long lead times for conducting research and building factories, suc-



Pondering the future

cess and failure in the semiconductor industry can be many years, even decades, in the making. For SK Hynix, an early bet on HBM allowed the company to steal a march on its larger competitor. In 2013 it pioneered the original HBM industry standards in collaboration with AMD, an American chip firm. Samsung, by contrast, scaled down its HBM research team in 2019. Industry analysts point to a legacy of complacency among Samsung's top brass when it comes to shifts in technology.

Samsung's problems are not limited to its chipmaking business. Its share of global smartphone sales is roughly stable, despite stiffening competition from cheap Chi-

nese rivals. Elsewhere in the supply chain, though, Chinese companies are making life difficult. Two years ago the company gave up on competing against them in the liquid-crystal display (LCD) screen business. It now concentrates on more advanced organic light-emitting diode (OLED) screens, producing them both for its own devices and for those of other companies. Even there, however, it confronts Chinese competition, most notably from BOE Technologies, a state-owned enterprise which has rapidly climbed to prominence in the industry.

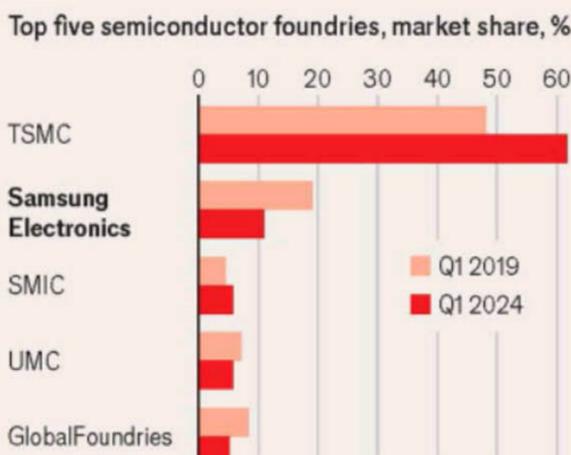
Display aggression

In November Samsung filed a complaint against BOE with America's International Trade Commission, accusing the company of misappropriating its trade secrets (BOE has not responded to the allegation). The OLED market is growing quickly, and South Korean producers such as Samsung still lead at the premium end of it. But the company has reason to be nervous. According to the Korean Display-Industry Association, a trade body, the proportion of Chinese smartphones made with South Korean OLED panels has fallen dramatically, from 78% in 2021 to 16% in 2023.

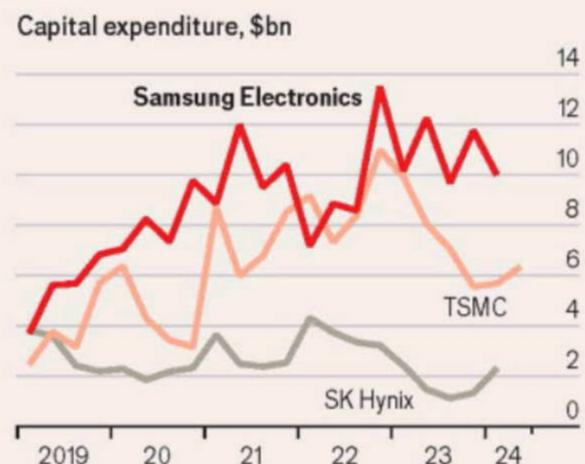
To make matters worse, the company has lately been grappling with a fractious workforce. In July thousands of its employees gathered outside company facilities south of Seoul, as part of the first organised work stoppage in the firm's history. The protest over pay and conditions is not yet resolved, and several thousand workers in the company's semiconductor factory are still refusing to return to work.

Nonetheless, there are glimmers of hope for the company. In July its HBM3 chips were accepted by Nvidia for its H20 processors, which comply with American export rules for the Chinese market. Samsung's next iteration of HBM chips is now being evaluated by possible buyers. It plans to begin the mass production of cutting-edge two-nanometre logic chips in 2025, and has secured orders from custom- ▶▶

Found wanting



Sources: Capital IQ; LSEG Workspace; TrendForce



ers including Preferred Networks, a Japanese AI firm. An added advantage for Samsung is that, as a supplier of both memory and logic chips, it can offer a one-stop shop for customers. It already has the necessary capabilities to package chips together, which is tricky.

Buyers of the most advanced memory and logic chips are desperate for more competition in the market. According to Myron Xie of SemiAnalysis, a consultancy, Nvidia is “very keen” that all three of the

leading memory-chip companies—Samsung, SK Hynix and Micron, an American firm—are able to offer the products it needs. He adds that, when it comes to manufacturing logic chips, Samsung “doesn’t have to be on par with TSMC, but does need to be closer to make it an acceptable proposition”.

The company is aware of the threats it faces. It has shaken up its leadership, replacing Kyung Kye-hyun, the boss of its chipmaking business, with Jun Young-hy-

un, who had previously run Samsung’s growing battery subsidiary, in May. And it has been investing to catch up with rivals. Samsung’s capital expenditure over its most recent four quarters amounted to \$44bn, compared with \$26bn for TSMC and \$6bn for SK Hynix (see chart on previous page). Yet unlike those more focused firms, it is spending to fend off competitors on various fronts. The company’s integrated model has served it well over the decades. But it has its drawbacks, too. ■

BARTLEBY

Booze, sweat and plexiglass

What is the point of industry awards?

INDUSTRY AWARDS are ridiculous and ubiquitous. That both of these things are true is doubtless a sad commentary on the human condition. But it also tells you something about the things that employees value.

The ridiculousness is obvious. All the attributes of glamorous awards shows are replicated save for one ingredient: glamour. At awards shows on TV, almost everyone looks comfortable in their glad rags. At industry awards shows, almost no one does. The bow ties are clip-on; the talk is of when the tuxedo has to be returned to the rental shop. Every so often someone suddenly goes over on her new heels and disappears spectacularly from view. There is a sense of excitement but mainly because the drinks are free. Everyone is a bit sweaty.

There is a brief moment of anticipation when the identity of the celebrity host for the evening is revealed, followed by an even briefer moment of silence, then the sound of 400 people asking “Who’s that?”. The host will attempt to strike a serious note about the importance of the work that all the nominees do (how the world depends on the composites industry, why baking soda will end poverty) while guests neck the bubbly and surreptitiously pocket copies of the menu.

Then it’s on to the main event. When the awards are actually handed out, pictures of the nominees are shown on a screen so you can see what everyone looks like sober (and ten years younger). Some categories are so absurd that you start to suspect someone is playing a practical joke. Britain’s water industry really does compete to win the award for “Leakage Initiative of the Year”; the wedding industry hands out a gong for the best barn venue. Others are even

more prestigious. “The Supreme Award is the highest accolade at the Brick Awards” is not a made-up sentence.

No one involved thinks this is a completely fair fight. The pool of candidates may well be self-selecting: nominees often send in their own entries. The judging process is usually opaque. It costs a lot of money to attend awards dinners and you would not blame the organisers for making sure that the trophies are shared out a bit. It’s not quite a case of “all must have prizes”. But if your firm stumped up for a platinum table with a magnum of champagne and a guaranteed position at the front of the ballroom, it probably expects something in return.

The winners don’t care about any of that. (The losers try to look magnanimous and then write bitter columns like this one.) When their names are announced, they sway to the front and grin awkwardly for a photographer. They return to their tables clutching a gigantic piece of plexiglass; colleagues crowd round to examine it as though it were the Rosetta Stone. Once every category, attendee and weak

joke has been exhausted, the host wraps up. People head to the bar for a final drink. “Is it still free?” they ask hopefully.

If these ceremonies are so absurd, why do they persist? Some reasons are obvious. A night out is fun. Awards do add lustre to the winners’ CVs: if you were in the brick industry, you’d definitely like to be able to say that you have won the Supreme Award. They can burnish the reputation of overlooked departments within firms. And for the companies shelling out for tables, awards are a little bit of cheap marketing to the outside world.

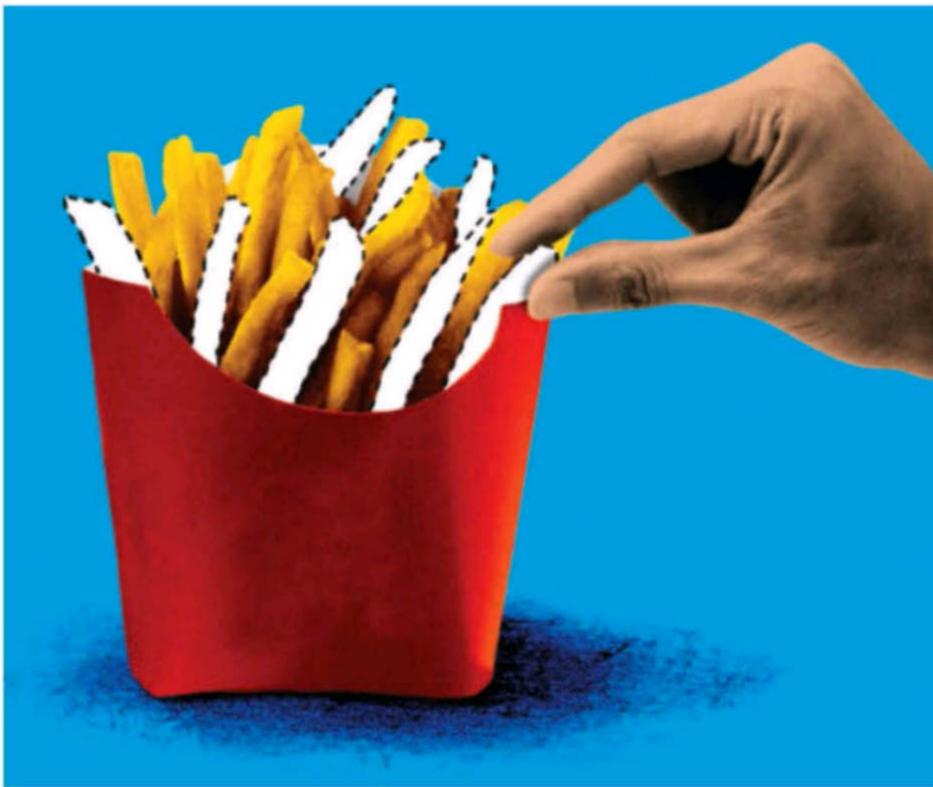
But award ceremonies also survive because they tap into employees’ deeper needs. They offer a sense of recognition, however imperfect, for your work. There is validation in knowing that your boss put you forward for a gong, or that the sanitation industry sees you as a rising star. Awards impart a sense of collective purpose. This is not just a roomful of sweaty people; this is the grounds-management industry and by God, it is something worth celebrating.

Awards can also make people feel as if they are on a team. Competition is one of the central facts of capitalism, but for many employees the contest can feel abstract. Once a year the civilised surroundings of a large hotel ballroom provide a simulacrum of that competition. Over napkins folded into flowers, nominees come face to face with the employees of rival companies. Winners are greeted as heroes; losers get consoling pats on the back. Awards are absurd, but they make you feel as if you belong.

Boss Class, Bartleby’s podcast series on management and work, has recently been nominated in the 2024 British Podcast Awards. To be clear, these particular awards are in no way ridiculous.



SCHUMPETER

*Have American consumers had their chips?**Lessons from a McDonald's meal deal and a bowl of Chipotle chicken*

NEAR SCHUMPETER'S home in Los Angeles are two fast-food restaurants almost kitty-corner to each other, as Americans quaintly put it. In different ways, both help explain one of the biggest puzzles in today's business environment: the state of the American consumer. One is Chipotle Mexican Grill, a canteen-like restaurant famous for its burritos and bowls of chicken, the cheapest of which comes with rice, beans, salsa and various other toppings, and which costs \$10.60. The other is McDonald's, home of the hamburger. Its cheapest meal deal is \$5. It comes with a burger, nuggets, fries and such generous quantities of salt it is a blessing that there is a fizzy drink to wash it down with.

You might think Chipotle would be suffering more in a world where consumers face high housing costs, utility bills and petrol prices, their savings are running down, and the job market is getting shakier. Not only is its menu dearer. In recent months the chain, a darling of millennials and gen-Zs, has found a hit squad of TikTok influencers on its case, filming themselves jabbing its bowls of chicken with their forks and accusing it of scrimping on the size of its famously generous portions.

But you would be wrong. In an earnings call on July 24th, its boss, Brian Niccol, acknowledged the portion-size problem in a small number of its restaurants and pledged to fix it. Despite the fuss, business boomed in the quarter from April to June. Chipotle's sales grew by a whopping 18% in the period, compared with the same three months in 2023. Demand increased in every income group, Mr Niccol said.

Under the Golden Arches, it was a different story. The lower-income customers of McDonald's have been feeling the pinch since last year, said Chris Kempczinski, its boss. In the latest quarter the chain's sales on a like-for-like basis fell by 1%, compared with the previous year. Even the recently introduced \$5 meal deal had yet to boost revenues.

The contrasting fortunes of these two chains may befuddle those looking to understand the state of America's consumers, especially when other industries are also sending mixed messages. But two lessons can be drawn. The first is that it is too soon to conclude that growth in American consumption has stalled. The

second is that, even if it has, it is too simplistic to say that the best response for firms is to cut prices.

The most recent economic indicators and quarterly earnings bear out the first point with a maddening (lack of) clarity. According to a University of Michigan survey published on July 26th, consumer sentiment hit its lowest point in eight months in July. A few days later, the Conference Board, a business group, said that in the same month shoppers' confidence rose. Like McDonald's, food and drink giants such as Coca-Cola, PepsiCo and Starbucks signalled weakness in America in recent months. So did Diageo, the world's bartender-in-chief. But Procter & Gamble (P&G), the mammoth purveyor of non-food brands such as Pampers nappies and Gillette razors, saw no sign that American shoppers were in retreat. "So far, so good," said its boss, Jon Moeller. The consensus is that low-income shoppers are hurting the most. But the degree to which others are feeling the pinch is hard to say. Sales in America of Hermès, maker of the Birkin bag, soared; those of LVMH, another high-society stalwart, did not.

If anything, consumers appear more picky than panicky. The higher costs of living mean more are staying at home rather than going out. Prices at restaurants are rising faster than at supermarkets, so even chains like McDonald's no longer seem as cheap as they used to. In California, this is particularly true. A law implemented in April requiring fast-food chains to pay a minimum wage of \$20, up from \$16, has raised prices, scaring many customers away, says John Gordon, an independent analyst. When diners do go out, the novelty of doing so may lead them to spend more, helping explain why Chipotle is doing better than McDonald's.

Even those who stay at home still splash out on the odd treat, says Sally Lyons Wyatt of Circana, a market-research firm. Those wanting to save money buy retailers' own-label products, look for bargains online, or go to dollar stores. But they have not forsaken pricier brands, especially those that offer something fresh, or a cheaper option than going out. She calls this bifurcation.

Consider food. Because they go out less, diners have more money to splurge on meals at home: an "Italian" night in, say, with premium-priced pasta and wine. They behave similarly with non-edible goods, such as personal care. Consumers may no longer feel their budgets stretch to pampering at beauty salons or barber shops on the high street. But they can afford to spend a bit more on upmarket products for use at home. Sellers of branded goods such as P&G are taking advantage of this trend by, for example, peddling fancy new grooming kits. Input costs may be higher, but the premium prices protect their profit margins.

Nuggets of truth

In sum, even if American consumers are feeling the pinch, companies that cater to them can still do well if they think creatively. Cutting prices is not the only option. It can spur a race to the bottom, says Danilo Gargiulo of Bernstein, a broker: McDonald's may be able to cut prices, but so can Burger King. Better to provide value for money, that hard-to-define concept that attracts customers whatever the price. It encompasses both quantity and quality.

As an illustration, consider, if you will, two of Schumpeter's recent lunches. At Chipotle, his \$10.60 chicken bowl overflowed with tasty food. He ate half, and took the other half home for supper. In other words, two meals for the price of one. His \$5 McDonald's meal deal was not as skimpy as he expected. But it was so salty, he threw half of it away. ■

AI Briefs

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The matrix multiplications

Companies and countries are racing to control the global supply chain for AI chips

IN 1958 JACK KILBY at Texas Instruments engineered a silicon chip with a single transistor. By 1965 Fairchild Semiconductor had learned how to make a piece of silicon with 50 of the things. As Gordon Moore, one of Fairchild's founders, observed that year, the number of transistors that could fit on a piece of silicon was doubling on a more or less annual basis.

In 2023 Apple released the iPhone 15 Pro, powered by the A17 bionic chip, with 19bn transistors. The density of transistors has doubled 34 times over 56 years. That exponential progress, loosely referred to as Moore's law, has been one of the engines of the computing revolution. As transistors became smaller they got cheaper (more on a chip) and faster, allowing all the hand-held supercomputing wonders of today. But the sheer number of numbers that AI programs need to crunch has been stretching Moore's law to its limits.

The neural networks found in almost all modern AI need to be trained in order to ascertain the right "weights" to give their billions, sometimes trillions, of

internal connections. These weights are stored in the form of matrices, and training the model involves manipulating those matrices, using maths. Two matrices—sets of numbers arrayed in rows and columns—are used to generate a third such set; each number in that third set is produced by multiplying together all the numbers in a row in the first set with all those in a column of the second and then adding them all up. When the matrices are large, with thousands or tens of thousands of rows and columns, and need to be multiplied again and again as training goes on, the number of times individual numbers have to be multiplied and added together becomes huge.

The training of neural nets, though, is not the only objective that requires lightning-fast matrix multiplication. So does the production of high-quality video images that make computer games fun to play: and 25 years ago that was a far larger market. To serve it Nvidia, a chipmaker, pioneered the design of a new sort of chip, the graphics-processing unit (GPU), on which transistors were laid out and connected in a way that let them do lots of matrix multiplications at once. When applied to AI, this was not their only advantage over the central processing units (CPUs) used for most applications: they allowed larger batches of training data to be used. They also ate up a lot less energy.

Training AlexNet, the model which ushered in the age of "deep learning" in 2012, meant assigning weights to 60m internal connections. That required 4.7×10^{17} floating-point operations (FLOP); each FLOP is broadly equivalent to adding or multiplying two numbers. Until then, that much computation would have been out of the question. Even in 2012, using the best CPUs would not just have required a lot more time and energy but also simplifying the design. The system that trained AlexNet did all its phenomenal FLOPPING with just two GPUs.

A recent report from Georgetown University's Centre for Emerging Technology says GPUs remain 10-100 times more cost-efficient and up to 1,000 times faster than CPUs when used for training models. Their availability was what made the deep-learning boom possible. Large language models (LLMs), though, have pushed the demand for calculation even further.

Transformers are go

In 2018 Alec Radford, a researcher at OpenAI, developed a generative pre-trained transformer, or GPT, using the "transformer" approach described by researchers at Google the year before. He and his colleagues found the model's ability to predict the next word in a sentence could reliably be improved by adding training data or computing power. Getting better at predicting the next word in a sentence is no guarantee a model will get better at real-world tasks. But so far the trend embodied in those "scaling laws" has held up.

As a result LLMs have grown larger. Epoch AI, a research outfit, estimates that training GPT-4 in 2022 required 2×10^{25} FLOP, 40m times as many as were used for AlexNet a decade earlier, and cost about \$100m. ▶▶

→ See online

To read this, and past, series of briefs go to: www.economist.com/schools-brief

▶ Gemini-Ultra, Google's most powerful model, released in 2024, is reported to have cost twice as much; Epoch AI reckons it may have required 5×10^{25} FLOP. These totals are incomprehensibly big, comparable to all the stars in all the galaxies of the observable universe, or the drops of water in the Pacific Ocean.

In the past the solution to excessive needs for computation has been a modicum of patience. Wait a few years and Moore's law will provide by putting even more, even faster transistors onto every chip. But Moore's law has run out of steam. With individual transistors now just tens of nanometres (billions of a metre) wide, it is harder to provide regular jumps in performance. Chipmakers are still working to make transistors smaller, and are even stacking them up vertically to squeeze more of them onto chips. But the era in which performance increased steadily, while power consumption fell, is over.

As Moore's law has slowed down and the desire to build ever-bigger models has taken off, the answer has been not faster chips but simply more chips. Insiders suggest GPT-4 was trained on 25,000 of Nvidia's A100 GPUs, clustered together to reduce the loss of time and energy that occurs when moving data between chips.

Much of the \$200bn that Alphabet, Amazon, Meta and Microsoft plan to invest in 2024 will go on AI-related stuff, up 45% from last year; much of that will be spent on such clusters. Microsoft and OpenAI are reportedly planning a \$100bn cluster in Wisconsin called Stargate. Some in Silicon Valley talk of a \$1trn cluster within the decade. Such infrastructure needs a lot of energy. In March Amazon bought a data centre next door to a nuclear power plant that can supply it with a gigawatt of power.

The investment does not all go on GPUs and the power they draw. Once a model is trained, it has to be used. Putting a query to an AI system typically requires roughly the square root of the amount of computing

GPUs remain 10-100 times more cost-efficient and up to 1,000 times faster than CPUs

used to train it. But that can still be a lot of calculation. For GPT-3, which required 3×10^{23} FLOP to train, a typical "inference" can take 3×10^{11} FLOP. Chips known as FPGAs and ASICs, tailored for inference, can help make running AI models more efficient than using GPUs.

Nevertheless, it is Nvidia that has done best out of the boom. The company is now worth \$2.8trn, eight times more than when ChatGPT was launched in 2022. Its dominant position does not only rest on its accumulated know-how in GPU-making and its ability to mobilise lots of capital (Jensen Huang, its boss, says Nvidia's latest chips, called Blackwell, cost \$10bn to develop). The company also benefits from owning the software framework used to program its chips, called CUDA, which is something like the industry standard. And it has a dominant position in the networking equipment used to tie the chips together.

Supersize me

Competitors claim to see some weaknesses. Rodrigo Liang of SambaNova Systems, another chip firm, says that Nvidia's postage-stamp-size chips have several disadvantages which can be traced back to their original uses in gaming. A particularly big one is their limited capacity for moving data on and off (as an entire model will not fit on one GPU).

Cerebras, another competitor, markets a "wafer scale" processor that is 21.5cm across. Where GPUs now contain tens of thousands of separate "cores" running calculations at the same time, this behemoth has almost a million. Among the advantages the company claims is that, calculation-for-calculation, it uses only half as much energy as Nvidia's best chip. Google has devised its own easily customised "tensor-processing unit" (TPU) which can be used for both training and inference. Its Gemini 1.5 AI model is able to ingest eight times as much data at a time as GPT-4, partly because of that bespoke silicon.

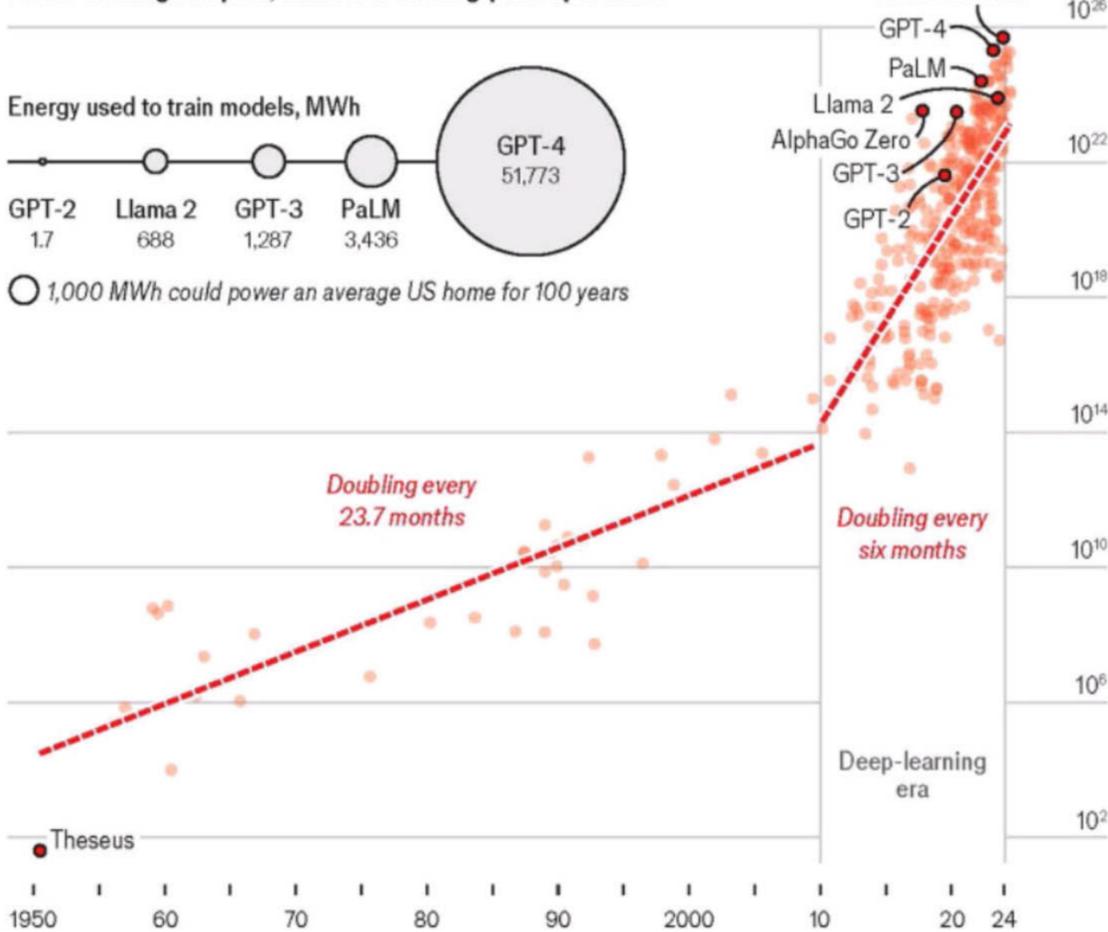
The huge and growing value of cutting-edge GPUs has been seized on for geopolitical leverage. Though the chip industry is global, a small number of significant choke-points control access to its AI-enabling heights. Nvidia's chips are designed in America. The world's most advanced lithography machines, which etch designs into silicon through which electrons flow, are all made by ASML, a Dutch firm worth \$350bn. Only leading-edge foundries like Taiwan's TSMC, a firm worth around \$800bn, and America's Intel have access to this tool. And for many other smaller items of equipment the pattern continues, with Japan being the other main country in the mix.

These choke-points have made it possible for the American government to enact harsh and effective controls on the export of advanced chips to China. As a result the Chinese are investing hundreds of billions of dollars to create their own chip supply chain. Most analysts believe China is still years behind in this quest, but because of big investments by companies such as Huawei, it has coped with export controls much better than America expected.

America is investing, too. TSMC, seen as a potential prize or casualty if China decided to invade Taiwan, is spending about \$65bn on fabs in Arizona, with about \$6.6bn in subsidies. Other countries, from India (\$10bn) to Germany (\$16bn) to Japan (\$26bn) are increasing their own investments. The days in which acquiring AI chips has been one of AI's biggest limiting factors may be numbered. ■

→ Re-doubling

Model-training compute, number of floating-point operations



Sources: Epoch AI; FreeingEnergy

Finance & economics



Travel problems (1)

Hotting up

BARCELONA

The war on tourism is often fought with self-harming tactics

COOLING OFF is easy in Barcelona. Swim in the sea, sip sangria—or just hang about looking like a holidaymaker. Recently residents have taken part in anti-tourist protests, some firing at guests with water pistols. Other rallies calling for an end to mass tourism have taken place across the Balearic and Canary Islands. And it is not just Spaniards. Locals in Athens have held funerals for their dead neighbourhoods. Authorities in Japan have put up a fence to spoil a popular view of Mount Fuji and prevent tourists gathering. Soon there will be a 5pm curfew for visitors to a historic neighbourhood in Seoul.

During the depths of the covid-19 pandemic many predicted that tourism would never return. Now, however, holidaymakers are back. According to UN Tourism, a multilateral agency, this year trips are set to nudge 1.5bn, up a tad from 2019. The dol-

lar, measured against a basket of currencies, is worth more than at any point over the past two decades, barring a four-month spell in 2022—meaning that Americans are particularly keen to travel. This ought to be a gift to the cities and countries being visited. Tourists bring cash and make little use of taxpayer-funded services. Indeed, officials in central banks and fi-

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nance ministries quietly welcome the inflows, even as politicians are being pushed by voters to soak tourists (with taxes) and limit arrival numbers.

Familiar spots in Europe are seeing visitor numbers soar. Trips to Greece, the fastest-growing market in southern Europe, jumped by a fifth in the first quarter of 2024, compared with the year before. Visitor spending in Portugal is forecast to be 20% higher this year than in 2019. To find even more impressive growth one must venture to developing countries, and plenty do. More than half of the ten fastest-growing destinations are in emerging markets, where guests can get more bang for their buck and tourist industries are being created from scratch. The number of holidaymakers in Albania and Saudi Arabia doubled in the first quarter of 2024, for instance, compared with five years ago. Arrivals to the Dominican Republic and Turkey have also shot up.

Tourism accounts for 3% of global GDP, a chunky 6% of cross-border trade and employs as many people as live in America—meaning its expansion will reshape economic activity and ease government budgets. The economies of Greece, Portugal and Spain all grew at a rate of 2% or higher last year, against an average of 0.4% across

▶ the EU. Taking the broadest possible definition, some 20% of Albania's economy now relies on tourists, up by two percentage points from five years ago. In Saudi Arabia tourism's contribution to GDP has grown by a third in the past year. Holidays are a serious business.

Tourism, like any export, generates national income. Unlike consumers of other exports, tourists travel to the source country to consume products, rather than the other way round. Goods and services that are not normally tradeable, such as a paella by the beach, become so. In most places, foreign diners will pay consumption taxes while using few public services—unless, that is, the prawns turn out to have been dodgy. Although there are surge costs, such as requiring additional police in the summer, there are also surge benefits, such as tourists paying for train tickets during off-peak times, when carriages might otherwise be empty.

The problem is that higher tax receipts offer diffuse benefits, whereas the costs of tourism are concentrated. In Barcelona residents are annoyed by crowds, dirty streets and higher prices, as well as stores selling cannabis and tacky souvenirs. Majorca's situation is "unbearable", says Joana Maria, who organises local anti-tourist protests. The population of the island can swell from 1m to 1.4m in peak periods.

Hit the road

Some economists also worry. As tourism booms, it draws in a larger share of an economy's capital and labour. Critics liken this to a kind of "Dutch disease", where rapid growth in one export sector prevents other, higher-value-added industries from growing. According to Giuseppe Di Giacomo at the University of Lugano and Benjamin Lerch of the Swiss finance ministry, growth in Italy's tourism business from 2010 to 2019 reduced demand for education, resulting in lower university enrolment and completion rates. Serving pizzas to hungry tourists seems a great way to get by at the age of 20; by the age of 40 a tiring waiter may wish he had studied for that degree. The holiday sector relies on lots of poorly paid workers whose productivity grows only slowly—meaning it would be a particularly bad business for developing countries to get stuck in.

Policymakers want to turn the boom to their benefit and keep locals happy. From Portimão, a lovely beachside spot in Portugal, to Poole, which also has a beach and is in Britain, towns across Europe are making guests pay more in taxes, so as to ration access and improve infrastructure. Some would like to attract richer guests; others are attempting to reduce visitor numbers altogether. Cruise-ship passengers are often particularly unwelcome since they crowd streets without having the decency

to pay for hotels or restaurants. Greece plans to cap the number of berths in 2025, after passenger arrivals increased by 50% last year. Where rents are high, as in Barcelona and Lisbon, governments are cracking down on short-term lets.

In some places, tourist taxes are effective. Gangbusters growth in emerging markets is in part a result of travellers looking for a bargain. These destinations tend not to have museums stocked with the world's loot or unique Broadway shows; instead, they often attract visitors with offerings that are more easily substituted, namely beaches and booze. Festus Fatai Adedoyin of Bournemouth University and co-authors find that in one such spot, the Maldives, each 10% increase in taxes reduces arrivals by 5.4%, but this hurts an industry that contributes almost a third of GDP.

By contrast, in places with unique attractions, taxes are less likely to put off tourists. Amid a throng of visitors outside a home designed by Antoni Gaudí, a famous Catalan architect, Nina Tavolder, a Canadian, says she was undeterred by the €4-7 (\$4-8) nightly charge. She chose Barcelona for its culture, food and nightlife: "We would not consider not coming because of the tax." A study in 2019 by Song Haiyan of Hong Kong Polytechnic University and co-authors found that higher airfare levies, a type of tourist tax, did not affect overall spending, merely shifting budgets. Those paying more for flights then splashed less on hotels and meals. As Jordi Valls, one of Barcelona's deputy mayors, puts it, the flow of tourists is "unstoppable".

Although tourists are unlikely to stop visiting because of a price rise, they may change how they visit. Venice has experimented with a €5 entry charge for day-trippers this summer, which it is considering doubling, in the hope of encouraging visitors to stay the night. Japanese officials, meanwhile, levied a ¥2,000 (\$13) congestion charge on a crowded hiking trail at Mount Fuji on July 1st in an attempt to shift tourists to other routes and ease the environmental burden. Copenhagen is offering free meals and museum passes to tourists who do some litter picking.

It is worth trying to make tourism work, rather than to become as unwelcoming as possible. If guests raise local prices, they will also raise wages, notes Chloe Parkins of Oxford Economics, a consultancy. Governments can do more to accommodate arrivals, both by building infrastructure and loosening planning rules. Rents would not rise as fast in Barcelona, for instance, if housing supply responded to foreign and local demand. Indeed, history shows that tourism receipts can be invested in infrastructure and higher value-added sectors, as has happened in Italy and, more recently, Mexico. In most cases, summer holidays can be enjoyed by everyone. ■

Travel problems (2)

Beat the crowds

Where is overtourism worst?

CITIES EVERYWHERE are busy implementing measures to deter excess tourism. But most people agree holidaymakers offer an economic bounty. So what would the ideal tourist market look like? Residents would probably prefer a small number of high-spending visitors, to minimise disturbance and maximise revenues. Figures compiled by *The Economist* rank 20 popular destinations on their appeal to international travellers, and provide a sense of which cities are nearest to—and furthest from—this ideal.

Start with international arrivals. In absolute terms London and Tokyo led the field last year, with 20m visitors each, followed by Istanbul, with 17m. Global cities attract lots of visitors. Divide them by population, though, and Amsterdam, Paris and Milan claim the top three spots, with a remarkable ten, eight and six arrivals per resident. The Dutch city's appeal may frus- ▶▶

Following the herd

International tourism, 2023

| City | Arrivals per resident* | Spending per resident, \$'000 |
|--------------|------------------------|-------------------------------|
| Amsterdam | 10.1 | 11.2 |
| Paris | 8.0 | 9.2 |
| Milan | 6.3 | 2.6 |
| Barcelona | 5.9 | 5.1 |
| Kuala Lumpur | 5.4 | 4.1 |
| Dubai | 4.8 | 8.2 |
| Osaka | 3.6 | 4.9 |
| Rome | 3.2 | 3.0 |
| Bangkok | 3.0 | 2.4 |
| Singapore | 2.3 | 3.3 |
| London | 2.3 | 2.4 |
| Madrid | 1.7 | 4.3 |
| Los Angeles | 1.5 | 1.3 |
| Tokyo | 1.5 | 1.3 |
| New York | 1.4 | 2.2 |
| Istanbul | 1.1 | 1.2 |
| Berlin | 1.1 | 1.4 |
| Hong Kong | 0.6 | 0.6 |
| Seoul | 0.3 | 0.5 |
| Shanghai | 0.1 | 0.3 |

Sources: CEIC; government statistics; Oxford Economics; *The Economist*

*Includes non-tourist arrivals

trate local officials. In recent years they have sought to stem the flood of tourists by reducing the supply of hotel accommodation, banning cruise ships and raising hotel taxes. In the end, it seems the lure of some lovely canals and gouda cheese, among other things, is too much to overcome.

Tourist spending—on attractions, accommodation, transport and the like—was highest in Dubai at \$29bn last year, followed by London at \$21bn and Singapore at \$19bn. Amsterdam, Paris and Dubai

earned the most on a per resident basis. The gap between high-ranking cities is surprisingly large. Visitors to Amsterdam spent four times as much, on such a basis, as those to Milan. If you cram an unfeasibly large number of tourists into a city, spending per resident rockets. An Amsterdam with fewer tourists would be a poorer city. Overcrowding has some upsides.

Some places, though, have stumbled across an even better state of affairs: bringing in big revenues without overcrowding.

Visitors to Osaka, Japan's ancient second city, spend \$4,900 per local; those to Madrid spend \$4,300. Neither city is particularly busy, with four and two visitors a year per resident, respectively. That will sound very attractive to residents of Amsterdam. Yet perhaps even a few tourists is still too many. Authorities in Osaka are considering charging foreign tourists an entry fee in order to combat "overtourism". And anti-tourist graffiti has started to appear across Spain's capital city. ■

BUTTONWOOD

Put down the cocktail

Investors beware: summer madness is here

SO MUCH OF finance is automated these days you can forget quite how strongly markets echo human rhythms. Yet stock exchanges still ring their opening and closing bells at either end of the working day designed a century ago in Henry Ford's car factory; the more civilised of them even break for an hour at lunch. The foreign-exchange market notionally operates around the clock, but it is a brave soul who attempts a big order during London's early hours, before the City is open for business. And it is not just daily routines that matter—seasonal ones do, too. Spare a thought, then, for the 20-somethings left to run the northern hemisphere's trading desks over the next few weeks, while their bosses doze on a beach.

Possibly for this reason, markets are often more jittery than usual during the summer months. Last year, for example, it was in August that American share prices began their final protracted fall before a storming bull run that took them to new all-time highs. That may be down to liquidity, which, with many investors also off reclining in the sun, tends to be slightly thinner during the holiday season than in the rest of the year. It may also be that the lack of veterans on banks' trading floors allows panic to set in more easily. Prices can swing a lot further before someone musters the courage to push back.

This summer has already tested nerves. After months of rising at a break-neck pace, stockmarkets around the world have been knocked off-kilter. On July 24th America's benchmark S&P 500 index had its worst session since December 2022, falling by 2.3%. Equities elsewhere followed suit the next day. Wall Street's "fear gauge", the VIX index, which measures expected stockmarket

volatility through the prices traders pay to protect themselves from it, has leapt up after months in the doldrums. Meanwhile, the Japanese yen, an erstwhile safe-haven currency, has rallied at close to its fastest rate in two decades. It is almost enough to rouse a senior trader from his sunbed.

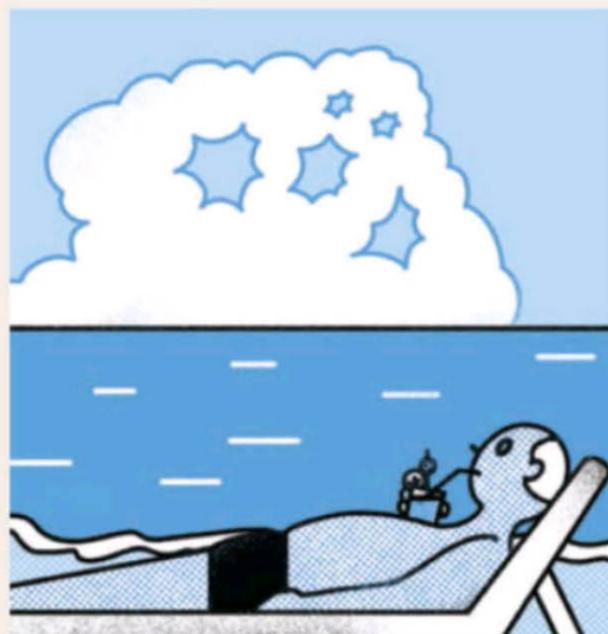
What is more, the rumpus may be only getting started. One reason is that stockmarkets have become eye-poppingly concentrated. America's now constitutes nearly two-thirds of global equity value, and increasingly revolves around the fortunes of a small cluster of firms. The S&P 500's big drop came just after Alphabet and Tesla reported their second-quarter earnings, and days before Amazon, Apple, Meta and Microsoft were due to follow suit. In other words, a handful of tech giants worth a collective \$11trn, or a quarter of the S&P 500's total value, released their earnings in a little over a week. So much hinges on investors' attitudes towards such companies that it is easy to envisage further ructions ahead.

At the same time, those attitudes appear to be shifting from euphoria to some-

thing a little more mercurial. The share price of Nvidia, the darling of the previous bull run, has fallen by 14% since a peak in June, while gyrating madly along the way. On July 30th it plunged by 7%, then rocketed by 13% on July 31st. Alphabet lost 5% of its market value the day after its earnings report, despite beating analysts' revenue expectations. Tesla's results, which undershot expectations, led to a one-day drop of 12%.

Such big moves are not solely down to jumpy traders. They are also a result of the extreme positions investors have taken. Analysts at the Royal Bank of Canada note that asset managers have bet more aggressively on futures contracts linked to the NASDAQ 100, an index dominated by big-tech firms, than at almost any other time in the past. With these bets already placed, few buyers remain to take prices higher; any change in sentiment can trigger a crash. And it is not just the tech giants. Positioning in S&P 500 futures, as well as those for America's stockmarket more broadly, is more bullish—and hence more vulnerable to a reversal—than it has been since the Royal Bank of Canada began tracking it in 2010.

The consequence is that an awful lot rides on how quickly the Federal Reserve can cut rates, giving earnings a boost that has already been priced in. Following the rate-setters' latest get-together on July 31st, such a move seems imminent. "A reduction...could be on the table as soon as the next meeting in September," said Jerome Powell, the Fed's chairman. Even this, though, was already seen by investors as a sure thing. Any news suggesting it might not be, or that further cuts might not swiftly follow, would be just the sort of catalyst to make an already wild summer wilder still.





Gary Gensler

Seeking security

WASHINGTON, DC

An interview with the most controversial man in American finance

HOW MANY Securities and Exchange Commission chairs can you name? Even in Washington it is hard to imagine a passer-by being able to come up with more than one. Perhaps the best known is Joe Kennedy, the SEC's first chairman, who took office during the Depression when Americans had lost faith in markets and were clamouring for protection against conmen and fraudsters. And he is most famous for fathering a president.

Yet during his time at the SEC, Gary Gensler, the current chair, has become remarkably well-known, even notorious. So much so that on July 27th, when Donald Trump, the Republican presidential candidate, gave a speech at a bitcoin convention, his biggest cheer came when he announced: "On day one I will fire Gary Gensler and appoint a new SEC chairman." Mr Trump appeared taken aback by the roar. "I didn't know he was that unpopular. Wow...Let me say it again." He repeated: "On day one I will fire Gary Gensler."

In reality, Mr Trump will do no such thing. Every SEC chair since the agency was set up in 1934 has resigned when the presidency changed party, allowing the new administration to make its own pick.

The crypto crowd is just the noisiest example of the criticism Mr Gensler has faced during his time in office. He has also riled the likes of Ken Griffin, boss of Citadel, a mighty hedge fund, with rule changes in the Treasury market and ticked off bosses of private-market funds with new

disclosure rules. With his term possibly near its end, he sat down for an interview with *The Economist* on July 30th.

There is no disputing that Mr Gensler has been productive. "We laid out an agenda to propose around 50 sets of new rules," he points out. "And we've now...completed about three-quarters." If he finishes the rest, his tally will amount to 15% more rules than Jay Clayton, his predecessor, and more than double the number of Mary Jo White, Mr Clayton's predecessor.

Mr Gensler's detractors portray this as overreach. Yet he entered office with an urgent to-do list. His appointment in 2021 came a year after the Treasury market, the world's most important capital market, briefly ceased to function; a few months after retail traders pushed up GameStop shares 15-fold in a fortnight, forcing brokerage firms to the brink; and at the time of a crypto frenzy. Mr Gensler has pushed through sweeping changes—not because he is meddling, he says, but because they were required.

If there is a philosophy to his agenda it is that more transparency is better, competition is good and regulators must keep moving because markets do. "We've updated our rules, because technology rapidly changes, because business models change. Nothing stands still in life," he says. Mr Gensler sees much of crypto as being securities, and therefore under his remit (the industry vehemently disagrees). His actions against the sector have had

mixed results, with lawsuits progressing against big players like the crypto exchanges, even as some have stalled.

It is his other actions, though, that are more consequential. Take the stockmarket. In 2021, in part owing to growing settlement risk associated with GameStop trading, clearinghouses, the institutions that settle equity trades, "said to the main brokerage houses, 'We can't take any more buy orders for these listed stocks like GameStop,'" recalls Mr Gensler. "The investing public was shut out of the market. That wasn't right." Since May 28th, equities in America have settled "t+1", the day after a trade occurs, rather than "t+2", reducing the risk of a repeat. Mr Gensler is also planning changes to how exchanges operate, such as by allowing them to quote stock prices in smaller increments, as marketmakers, their competitors, already do.

In the Treasury market, trades will be routed through clearinghouses by the end of 2025, a change Mr Gensler hopes will usher in more trading between a greater range of counterparties. Rather than trades going through a bank and dealers, as is common now, it might be possible for hedge funds to trade directly with asset managers. As well as functioning better in times of stress, he thinks these changes will promote competition: "On the margin if we save just one basis point—and I'm not making any predictions—but even if we save one basis point, that's quite dramatic for the US taxpayer in a \$28trn market."

Mr Gensler is not surprised that he and the financial industry do not always see eye to eye. "Whether you're a diamond dealer, an auto dealer, or a stock or bond dealer...opacity, darkness, tends to help," he says. "Adam Smith wrote about this in the 18th century: transparency helps markets." This is a lesson that his own time in industry drilled home. "I worked at Goldman Sachs for many years. And there were a number of sayings...one was 'opacity or darkness [is] the friend of the firm.'"

Yet this enthusiasm for transparency has led him to push boundaries. His proposals for climate disclosure, which would be onerous, have been challenged in the courts. Sweeping regulations for private-market funds, which would have required quarterly statements on performance and fees, and also restricted their ability to charge levies, have been thrown out.

Mr Gensler expresses a willingness to adapt. "If a court rules one way, I adjust. What do you do?" But he will adapt, not relent. Rather like Lina Khan, the chair of the Federal Trade Commission, another regulator, his term has been defined by a dogged pursuit of a big agenda. Yet unlike Ms Khan, he has more to show for his efforts, and has suffered fewer setbacks. If he remains in post, Wall Street and crypto should expect more of the same. ■

The state and growth

Modi's missteps

India's economic policy will not make it rich, says a new World Bank report

THE DEVELOPING world has fallen back in love with economic planning. As protectionism sweeps the West, poor countries are no longer afraid of industrial policy—or bold ambition. India's government declares that manufacturing will propel the country to high-income status by 2047. Indonesia wants to get there by 2050, with growth driven by green commodities. Vietnam is aiming for annual GDP growth of 7% until 2030. By the same time, South Africa wants to have more than doubled its income per person from 2021. Surely economies everywhere are about to accelerate.

Not so, according to a new report by the World Bank. At current growth rates, it will take India three-quarters of a century to reach a quarter of America's income per person. That is one calculation in the "World Development Report", released on August 1st, in which the bank's researchers run the numbers for 108 middle-income economies, accounting for 40% of the world's GDP and 75% of its population. Indermit Gill, the bank's chief economist, Somik Lall, one of his advisers, and co-authors argue that the fad for industrial policy, especially as practised in India and Indonesia, is unlikely to deliver the riches of which politicians are now dreaming.

The report starts by laying out the challenge. Since 1990 just 34 countries have attained high-income status. Thirteen were in the Eastern bloc and benefited from joining the EU; another handful in the Gulf and Latin America owe their wealth to commodity booms. Income per person in the median middle-income country has remained below a tenth of America's since the 1970s. If India is to sustain growth of 6-8% a year, it would repeat a feat only South Korea has managed.

Such growth, the bank's economists reckon, is fanciful. They argue governments would be better off seeking to maintain slower growth for longer. Mr Gill and co-authors suggest three aims: becoming more attractive to capital, making better use of existing technology and developing new tech. This is hardly groundbreaking. But what is new is the suggestion of a timeline, against which they mark the progress of middle-income countries.

Brazil, for instance, is thought to have been on the right track until it became a lower-middle-income country in the 1970s. At that point it should have focused on importing foreign technology and introduc-

ing state-owned conglomerates to international markets. Instead, it taxed international intellectual property. Local patents became more common, but the quality of innovation declined. Bulgaria, meanwhile, managed to integrate existing technology into domestic production, but its own research and development remains weak.

The authors criticise countries that hope to skip stages by developing home-grown technology, rather than rolling out stuff used elsewhere. Such an approach risks wasting scarce resources. Researchers will be tied up with bad products, state bureaucracy will be overwhelmed and funds will be channelled to unproductive firms. The report points out that South Korea's industrial policy subsidised the adoption of foreign tech, rather than incentivising the production of knowledge at the frontier of human thought. Any country that tries the latter path, the authors warn, will struggle to reach the frontier.

Mr Modi's "Make in India" strategy hopes to attract foreign firms to manufacture everything from phones to electric vehicles. That is better than plans in other developing countries. Malaysia offers subsidies to fledgling firms willing to try their hand at cloud computing. Indonesia shaves off some of the cost of an electric vehicle, but only if enough of its components are domestically designed. But there is a risk that India goes the same way.

Other prongs of the country's industrial policy seek to advance domestic technology, including in chips and defence. Since 2020 the state has banned the import of 509 common defence components as part of a bid to pump up local arms exporters. The country has nevertheless dropped out of the top 25 defence exporters.

India's management practices also come under fire. Although the World Bank usually sticks to conventional macroeconomics, the report's authors employ a somewhat Schumpeterian framework, holding out the possibility that incumbent firms can be efficient, but only if they are surrounded by new entrants to keep them on their toes. India's state prevents this at both ends of the spectrum. Small Reservation Laws ensure a portion of handouts go to firms too small to be efficient. Meanwhile, cronyism and poor competition policy foster unproductive giants. A firm in America that reaches its 40th birthday will typically have increased in size seven-fold. In India, it will only have doubled in size.

Not all of the World Bank's prescriptions stand up to scrutiny. Improving education is a worthwhile aim, if ferociously hard. Keeping populism at bay, also on the list, is another nice but tricky proposal. The report's fondness for South Korean industrial policy goes overboard. Yet it is surely right that much of the country's prosperity came from stonking private investment and openness to foreign tech. Mr Modi has been unable to get investment roaring in the sectors in which he wants India to produce its own breakthroughs. The risk is that, in making a premature push, the country will in time find it harder to develop industries that rival America's. Luckily, all is not lost. By the World Bank's calculations, policymakers have at least three-quarters of a century to get things right. ■



Time to rev the engine



Provincial lessons

Keeping the flame alive

YUEQING

China's last boomtowns show rapid growth is still possible

CHINA'S ECONOMIC miracle emerged from dozens of industrial entrepôts. Dongguan, famous for producing furniture and toys, as well as its many brothels, witnessed GDP growth of 21% in 2004. Hohhot, a town on the edge of the Mongolian steppe, posted growth of 18% in 2006 as it scarred its mineral-rich terrain with mines. Shanghai, the country's commercial hub, achieved 15% growth the next year as it churned out everything from machinery and textiles to cargo ships and steel, minting millionaires in the process.

These towns have since slowed along with the rest of the country. Shanghai, which now has an economy seven and a half times larger than 20 years ago, saw its GDP grow by just 5% last year. Yet there remain places where growth, if not quite miraculous, is still mightily impressive, running at 8-10% a year. Most are small "county level" cities, home to something between a couple of hundred thousand and a couple of million people, and administered by bigger nearby conurbations. China's last boomtowns are of great importance to Xi Jinping, the country's supreme leader, as he searches for ways to rejuvenate the economy, which in the second quarter of the year grew at a rate of just 4.7% year-on-year, down from 14.2% in 2007.

The third plenum of the Communist Party, a highly anticipated meeting that ended on July 18th, underlined the importance of "high-quality development", a

goal that includes upgrading basic manufacturing to higher-value industries. The get-together also identified urbanisation and support for the private sector as crucial. For a sense of what this might mean in practice, consider Yueqing, an eastern coastal municipality of 1.3m that last year still grew comfortably above 8%.

In 2023 the town's GDP came to 166bn yuan (\$24bn), around the same in real terms as that of Dongguan in 2004. Visitors will take in Yueqing's many churches and temples, nestled among steep mountains, before they notice the factories. Its industrial district is a collection of thousands of tiny plants producing the smallest electrical appliances, such as circuit breakers, switches and fuses. The town has been one of the world's main producers of low-voltage, low-value components since small underground operations emerged in the late 1970s, following Mao Zedong's death.

How has Yueqing kept up a near-miraculous pace? Its entrepreneurial past helps. So does access to Wenzhou, a port to the south. But government policy—in the form of an intense upgrade plan—also plays a part. Officials have helped factories shift from basic widgets to valuable electronics. Yueqing has, for instance, become a leader in bonding wires, which connect parts in semiconductors. Policymakers encouraged Jiabo Technology, a local firm, to work with a nearby university; together they overtook the foreign outfits that had led

the field. All told, 960 local firms are now considered to be "high tech" by officials, meaning they produce high-value goods. Fourteen are listed on a stock exchange, a rarity for a town of Yueqing's size.

Last year Yueqing became the first county-city in China to be referred to as a "national advanced manufacturing cluster". The title normally goes to larger cities that have built networks of enterprises in industries critical to Mr Xi's idea of high-quality development. Its award is perhaps a sign that advanced manufacturing will, in time, spread from the hubs of Shanghai and Shenzhen to smaller towns. Diffusion would help with another problem facing provincial China: the loss of people. Between 2010 and 2020, 1,240 counties and county-cities out of 1,866 saw their populations shrink, many by more than 20%, as people went to bigger cities in search of work. By contrast, Yueqing's population has grown. That in turn has helped it dodge the worst of China's property crisis.

Cities hoping to follow Yueqing's path will face obstacles, however. Some local factory bosses sneer when the state is given credit for its success. After all, a distinguishing feature of the town, and others in Zhejiang province, is that firms are fiercely private, owing to their underground history. Few state-owned enterprises exist in the area and locals pride themselves on being independent-minded. Many bosses are Christian, despite official distaste for the religion. A young leader at an electric-switch factory says that entrepreneurs even avoid borrowing from banks, preferring to use informal lending networks that allocate credit much more efficiently.

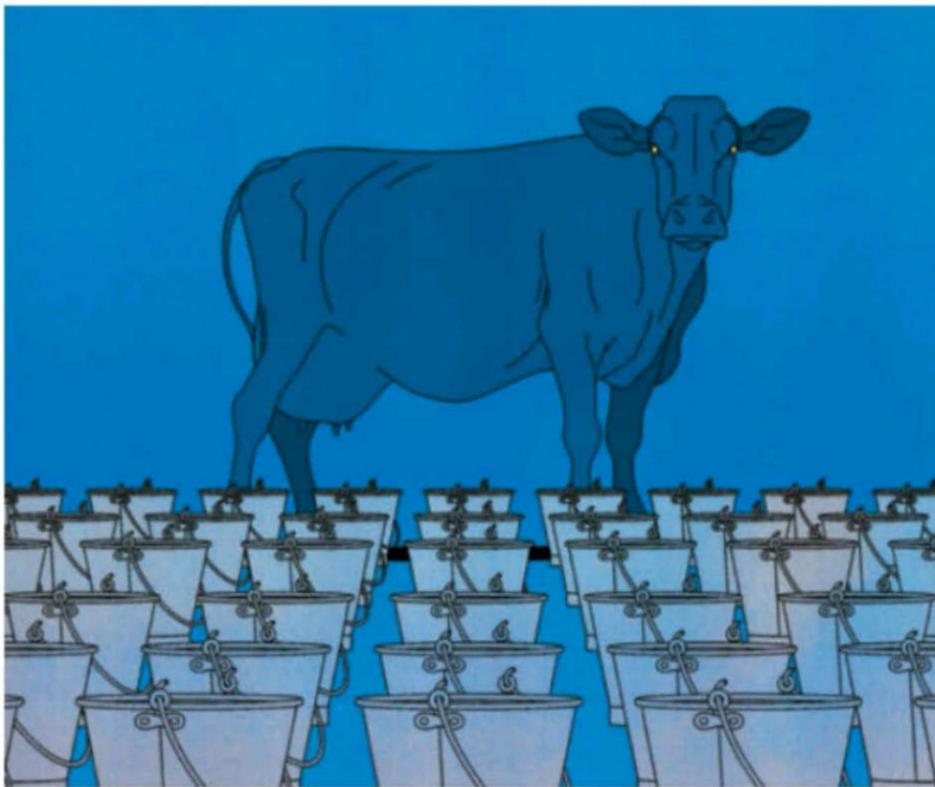
Where public policy has played a part, it has often complemented the strengths of private businesses. One measure hands out land to companies based on tax contributions and emissions. Local banks have been allowed to experiment with lending according to company performance, with low-interest, zero-collateral loans made available for leading firms. Many officials in the region have connections to industry, either as former business owners or as members of families that own small companies, says one boss. They tend not to intervene unless invited: the local government's role is to muster resources and foster connections, much like a consultancy.

If this sounds different from the rest of China, that is because it is. Mr Xi's time in power has featured a forceful demotion in the status of private business, which has been bruising for the country's most powerful tech entrepreneurs. Trust between businessmen and apparatchiks is low. The third plenum's report noted that the Communist Party must do more to assist the private sector. Perhaps, as Yueqing demonstrates, the best way it can assist China's firms is by doing less. ■

FREE EXCHANGE

The Brussels gambit

EU handouts have long been wasteful. Now they must be fixed



BUDGET TALKS in the European Union are a game of 27-dimensional chess. Members play simultaneously against one another, negotiating over many spending items at any one time. Countries are already preparing for the contest that starts next year, which is likely to be particularly dramatic. The world around the EU has shifted, owing to the war in Ukraine, the continent's increasingly difficult relationship with China and the growing urgency of climate change. That necessitates what Mario Draghi, a former president of the European Central Bank and prime minister of Italy, has called "radical change". Yet the bloc's biggest contributors, including Germany and the Netherlands, will be reluctant to stump up more cash. New outgoings for climate change and defence will have to be funded by cuts elsewhere.

Where will the money come from? The EU's two biggest pots are set aside for agricultural subsidies and regional redistribution. The first received €380bn (\$410bn) over the last seven-year cycle, or a third of the EU's regular budget. The redistribution pot got €390bn. Both are seen as foundational to the European project. Agricultural pay-outs are meant to support the continent's rural economy, compensating farmers for its relative openness to trade, without which they could charge higher prices. Regional-development funds are intended to complement the EU's single market, which benefits regions with successful clusters of firms. The desire, as Jacques Delors, a former president of the European Commission, once put it, is "a Europe built on competition that stimulates, co-operation that strengthens and solidarity that unites".

The time has come to rethink such ideas. At first glance, it may seem harsh to change policies that benefit Europe's farmers and poor. Yet appearances can be deceiving. In reality, the true beneficiaries of the EU's largesse are rather less deserving.

Start with agricultural subsidies. Economists have long understood that handouts to farmers end up with landowners. As this newspaper wrote in 1843 regarding the protectionist Corn Laws: "While they are highly injurious to the manufacturing and commercial classes, [they also do not] benefit the farmers nor the agricultural labourers...The only class that can derive benefit from them (if they can benefit any one) is the landed proprietors." This

is because land is a crucial input for agricultural production and, unlike fertiliser or tractors, more of it cannot easily be produced. If agriculture becomes more profitable because of subsidies, farmers will therefore respond by bidding up land's price.

A recent paper by Edoardo Baldoni and Pavel Ciaian of the Joint Research Centre, part of the European Commission, puts some numbers on this. The authors find that more than a fifth of European agricultural subsidies end up with landowners. The figure would be higher still if European land markets were more competitive. In areas with few large farms, owners of small plots struggle to find alternative tenants, lowering rental rates. Farmers often also collude to ensure that land rates stay low: it is poor form to pay more to kick your neighbour off his land. Nevertheless, takings by landowners may rise in years to come, even if their share of handouts does not. That is because the value of land is likely to increase owing to new green handouts. In the 2000s Germany subsidised electricity from biogas. Later research found that landowners in areas with lots of cattle were able to increase the rental price of land by €60-140 a hectare. Some of today's support for solar energy may end up in landowners' pockets, too.

It is a similar story with regional-development funds. The idea behind them is straightforward. Funnelling cash to poorer parts of the EU, for infrastructure, innovation and the like, should help their economies develop and thus help reduce inequality. Yet a new paper points out this is not what happens. Valentin Lang of the University of Mannheim, Nils Redeker of the Delors Centre Berlin, a think-tank, and Daniel Bischof of the University of Münster find that regions, as defined by the EU's scheme, are too large and diverse to sensibly guide funding. The authors combine household-survey data from various European countries, covering the period from 1989 to 2017, and find that inequality within EU regions is much more significant than divisions between EU regions. Funds would be better spent if they targeted poorer places and households within these regions.

More damning still, the EU's regional policies provide greater benefits to rich households in poor regions than to their least well-off peers. To isolate the policies' effects, the researchers compare regions that just met the eligibility threshold with those that narrowly missed out. They also look at EU enlargement, which suddenly lowered the EU's average GDP per person—against which poorer, deserving regions are measured. Like other studies, they find that the funding does boost regional growth. But drilling down into the household survey, they also find that spending does very little for poorer households within a region, even as richer households make hay. Indeed, people in the top 40% of the income distribution see annual incomes grow two to four percentage points faster. The reason for this, Messrs Lang, Redeker and Bischof discover, is that handouts tend to support higher-skilled jobs, since they end up funding projects involving larger, more technical firms. By helping the rich in poorer regions, convergence funds end up making within-region inequality worse.

French defence

Any attempt to mess with agricultural or regional handouts will meet howls of indignation and possibly worse: farmer protests involving spilled milk or dumped manure. Both schemes have numerous beneficiaries. They are also seen to capture something of the essence of the EU. But the world is changing. And so must the bloc. It is time for a bold gambit. ■

Science & technology



Medicine

A hop, snip and a jump

Gene-editing drugs are moving rapidly from lab to clinic. But plenty of technical and economic difficulties remain

ONE AUTUMN day in 2020 Patrick Doherty was walking his dog up a steep mountain in County Donegal, Ireland, when he noticed he was, unusually for him, running out of breath. The eventual diagnosis was terrifying: amyloidosis, a rare genetic disease that caused a protein, amyloid, to build up in his organs and tissues. The prognosis was even worse: it would cause him years of pain until it finally killed him. In the face of such terrible fortune, though, Mr Doherty had a stroke of luck. He was able to join a trial of a new medical therapy and, with just a single injection, was apparently cured. Now, he continues to walk his dog up that steep mountain in County Donegal every week.

The treatment edited Mr Doherty's genes using CRISPR-Cas9, a technology that has moved from lab to clinic at lightning speed. Scientists have already used gene editing to improve the vision of people with an inherited condition that causes blindness. They also appear able to cure

sickle-cell disease with it, and to restore hearing in deaf mice. This new class of medicines will gather pace in the coming year, tackling cardiovascular disease and cancer. A new generation of more precise and efficient gene-editing tools is also undergoing trials.

Cut and run

CRISPR-Cas9 acts like a pair of molecular scissors that cuts DNA at a precise location. A piece of RNA (a single-stranded version of DNA) attached to the medicine guides the cutting enzyme, Cas9. Once DNA is cut, the cell's natural repair mechanisms swing into action. Gene-editing medicines commandeer those natural cellular systems and end up replacing an ex-

isting (problematic) segment of code with a new (corrected) sequence.

The speed of innovation has been impressive. CRISPR-Cas9 was discovered in the lab in 2012 and just three years later eGenesis, a biotech firm in Cambridge, Massachusetts, had used it to edit pig embryos to create organs more suitable for transplantation into humans. By 2016 a CRISPR-Cas9 therapy was approved for testing in patients with cancer, albeit on immune cells that had been removed from the body, edited to help these cells fight the cancer better, and then returned.

The following year, Vertex and Crispr Therapeutics, pharmaceutical companies based in Boston, Massachusetts, and Zug, Switzerland, said they would co-develop a treatment named CTX001, a treatment for two disorders: sickle-cell disease and beta thalassemia. Both are caused by genetic faults in the instructions for making haemoglobin, a protein that helps red blood cells carry oxygen.

CTX001, known today as Casgevy (exagamglogene autotemcel), arrived on the market in November 2023, priced at \$2.2m for a one-time treatment. It involves collecting blood stem cells from a patient, editing a gene within them to restart the production of a type of haemoglobin that is usually produced only when a baby is in the womb, and re-injecting those stem cells. The patient is then capable of creat-

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▶ ing enough healthy red blood cells to treat the symptoms of their blood disorders.

As good as it is, CRISPR-Cas9 has limitations. The RNA guide molecule can sometimes be imprecise, leading to unintended cuts to a patient's DNA. Moreover, because the tool breaks both strands in a DNA helix, the subsequent repair can also introduce unwanted insertions or deletions. Damage to genetic information like this could eventually lead to cancer or disrupt cellular function in other ways.

Updates to the technology are thus in the works. CRISPR-Cas9 nickases, for example, are enzymes that cut only one strand of the DNA double helix. To make genetic changes, nickases therefore need to be used in pairs, meaning less risk of off-target effects. It is unlikely that both nickases in an edit would bind incorrectly to the same section of DNA. Another method, "base editing", can chemically change a single letter of a DNA's sequence into another without the need for cuts.

Some of these techniques are already in the clinic. In 2022 a patient with familial hypercholesterolaemia was given an infusion of a base-editing treatment as part of a trial. The disorder, which affects one in 250 people, results in reduced clearance of bad cholesterol from the blood. The treatment, VERVE-101, made by Verve Therapeutics, turns off the PCSK9 gene in the liver by making a single-letter change in the DNA (from A to G).

Beam Therapeutics, based in Cambridge, Massachusetts, is using base editing to make therapies for a range of conditions. These include making four DNA-letter changes to immune cells so that they are better able to attack leukaemia, as well as a product that works for the same diseases as Casgevy. The company reckons its base-editing drug will work better than CRISPR-Cas9 and deliver higher levels of haemoglobin. Data from early trials of base-editing technology in patients are expected in the second half of this year.

At the clinical frontier is "prime editing", which uses a Cas9 nickase along with a specially designed RNA guide that not only locates the correct region of DNA, but also carries a template of the desired change. Also attached to the CRISPR protein is an enzyme called reverse transcriptase. This reads the RNA template and synthesises the correct DNA sequence at the location of the nicked site, giving a precisely edited gene.

In April David Liu, a molecular biologist at Harvard University, posted on X that the first trial to use prime editing in a patient had been approved only four and a half years after his lab had published the first paper on the technology. Prime Medicine, a biotech firm in Cambridge, Massachusetts, has already begun clinical trials of its drug PM359 for the treatment of

chronic granulomatous disease—a life-threatening condition that affects the blood's ability to destroy infections.

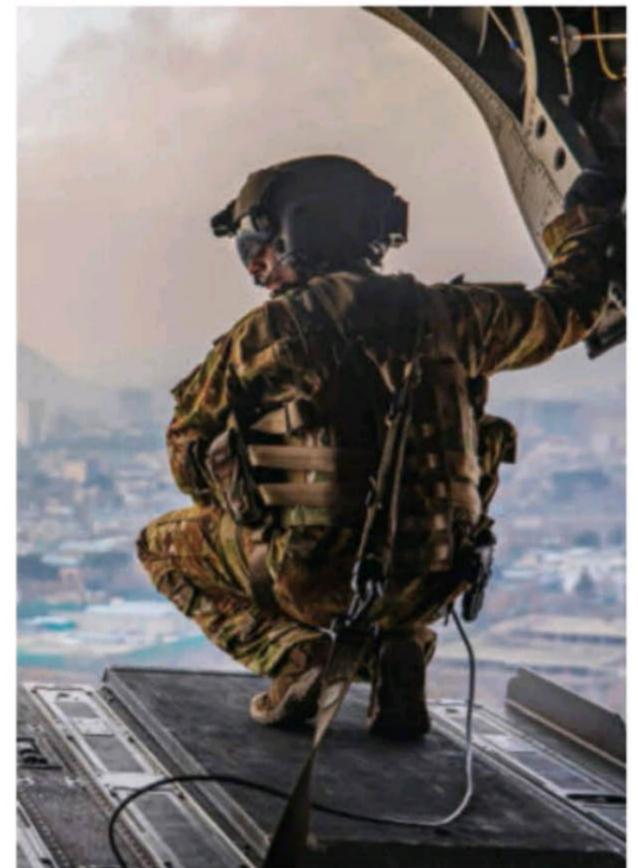
Being able to change larger pieces of the genome, as is the case with prime editing, makes it possible to treat diseases where errors stretch over a long distance, like Huntington's disease. But it could also help with the tricky economics of treating rare diseases. Instead of making a medicine that treats a single mutation to a gene, it would be possible to fix many types of mutation with one correction. The flexibility of the technology means that, in theory, prime editing could correct almost 90% of disease-causing genetic variations.

The technological progress in gene-editing tools has not stopped. Yet another method, known as "bridge RNA", details of which were published in *Nature* in June, uses a form of guide RNA that recognises two stretches of DNA—the target site and the new gene that is to be inserted. This new technique allows large stretches of DNA to be added, removed or inverted.

All these new technologies face technical and safety hurdles in the years ahead. A big question is how to deliver therapies to the right place in the body. Blood cells, cancers, the retina and the liver are all easy to reach and edit. The brain and lungs are more difficult. One solution to the delivery problem, proposed by Aera Therapeutics of Cambridge, Massachusetts, is a capsid, a nanoparticle with a protein shell. Based on human proteins, these nanoparticles could be targeted to different tissues while also not provoking a strong response from the body's immune system.

But perhaps the biggest challenge will be economic. So far, the new generation of genomic medicines have been eye-wateringly expensive—a shot of Hemgenix, a haemophilia B gene-therapy, costs \$3.5m, around a million dollars more than Casgevy. Firms believe they can charge high prices not only because of the costs of developing and making the drugs, but because they offer potentially lifelong benefits (although the durability of these treatments remains to be proved).

There are reasons to think costs might come down in time. Treating diseases that affect larger patient groups, such as heart disease, would help reduce costs. Ultimately, many believe gene-editing tools will evolve into "platforms", where the core technology would remain unchanged and only the specific instructions for changing genes would be tweaked for new diseases. This would reduce the need for clinical trials for every new drug. Until that happens, though, firms may be forced to drop even promising treatments because of market conditions. Yet gene editing is moving so fast that it seems only a question of when, not if, these new medicines will overcome their difficulties. ■



Military intelligence

I predict a riot

An AI tool could warn of Taliban attacks

IN THE SUMMER of 2020 American intelligence analysts in Afghanistan got a warning from "Raven Sentry", an artificial-intelligence (AI) tool that they had been operating for a few months. There was a high probability, the AI told them, of a violent attack in Jalalabad, the capital of the eastern Nangarhar province, at the beginning of July. It would probably cause between 20 and 40 casualties. The attack came, a little late, on August 2nd, when Islamic State struck the city's prison, killing some 29 people.

Raven Sentry had its origins in October 2019, when American forces in Afghanistan were facing a conundrum. They had ever fewer resources, with troop numbers falling, bases closing and intelligence resources being diverted to other parts of the world. Yet violence was rising. The last quarter of 2019 saw the highest level of Taliban attacks in a decade. To address the problem they turned to AI.

Political violence is not random. A paper published in *International Organisation* by Andrew Shaver and Alexander Bollfrass in 2023 showed, for instance, that high temperatures were correlated with violence in both Afghanistan and Iraq. When days went from 16°C highs to more than 38°C, they observed, "The predicted probability of an Iraqi male expressing support for violence against multinational forces [as measured in opinion polls] increased ▶▶

▶ by tens of percentage points.”

Raven Sentry took this further. A team of American intelligence officers, affectionately dubbed the “nerd locker”, was placed in a special forces unit, the culture of which is better suited to aggressive experimentation. They began by studying “recurring patterns” in insurgent attacks going back to the Soviet occupation of Afghanistan in the 1980s, says Colonel Thomas Spahr, who described the experiment in a recent paper in *Parameters*, the journal of the US Army War College.

Contractors based in Silicon Valley helped them train a neural network to identify the correlations between historical data on violence and a variety of open (ie, non-secret) sources, including weather data, social-media posts, news reports and commercial satellite images. The resulting model identified when district or provincial centres were at higher risk of attack, and estimated the number of fatalities that might result.

America’s intelligence agencies and the Pentagon bureaucracy were initially sceptical of the effort (they remain tight-lipped about it still). But the results were striking, says Colonel Spahr, who was chief of staff to the top intelligence official at the NATO mission in Afghanistan at the time. By October 2020 the model had achieved 70% accuracy, meaning that if it judged an attack to be likely with the highest probability (80-90%) then an attack subsequently occurred 70% of the time—a level of performance similar to human analysts, he notes, “just at a much higher rate of speed”.

“I was struggling to understand why it was working so well,” says Anshu Roy, the CEO of Rhombus Power, one of the firms involved. “Then we broke it apart, and we realised that the signatures were evident in the towns—they somehow knew.” Optical satellites (those that sense light) would observe towns as a whole becoming darker at night just prior to attacks, he says. However, areas in those towns associated with enemy activity in the past would get brighter. Synthetic aperture radar (SAR) satellites, which send out radar pulses rather than relying on ambient light, would pick up the metallic reflections of heightened vehicle activity. Other satellites would detect higher levels of carbon dioxide, says Roy, though it is not clear why.

Attacks were more likely, it found, when the temperature was above 4°C, lunar illumination was below 30% and it was not raining. “In some cases”, notes Colonel Spahr, “modern attacks occurred in the exact locations, with similar insurgent composition, during the same calendar period, and with identical weapons to their 1980s Russian counterparts.” Raven Sentry was “learning on its own”, says Colonel Spahr, “getting better and better by the time it shut down”. That happened in August 2021

when America pulled out of Afghanistan. By then it had yielded a number of lessons.

Human analysts did not treat its output as gospel. Instead they would use it to cue classified systems, like spy satellites or intercepted communications, to look at an area of concern in more detail. When new intelligence analysts joined the team, they would be carefully taught its weaknesses and limitations. In particular districts, says Mr Roy, the model was not very accurate. “Not much had happened there in the past,” he says, “and no matter how much modelling you do, if you can’t teach the model, there’s not much you can do.”

In the three years since Raven Sentry was shut down, armed forces and intelligence agencies have poured resources into AI for “indicators and warnings”, the term for forewarning of attack. Many of the models have matured relatively recently. “If we’d have had these algorithms in the

run-up to the Russian invasion of Ukraine, things would have been much easier,” says a source in British defence intelligence. “There were things we wanted to track that we weren’t very good at tracking at the time.” Four years ago SAR images had a ten-metre resolution, recalls Mr Roy; now it is possible to get images sharp enough to pick out objects smaller than a metre. A model like Raven Sentry, trained on data from Ukraine’s active front lines, “would get very smart very quickly”, he says.

Colonel Spahr says it is not a linear process. “Just as Iraqi insurgents learned that burning tyres in the streets degraded US aircraft optics or as Vietnamese guerrillas dug tunnels to avoid overhead observation, America’s adversaries will learn to trick AI systems and corrupt data inputs,” he says. “The Taliban, after all, prevailed against the United States and NATO’s advanced technology in Afghanistan.” ■

Artificial intelligence

On your marks

The performance of large language models is graded using benchmarks—but can they be trusted?

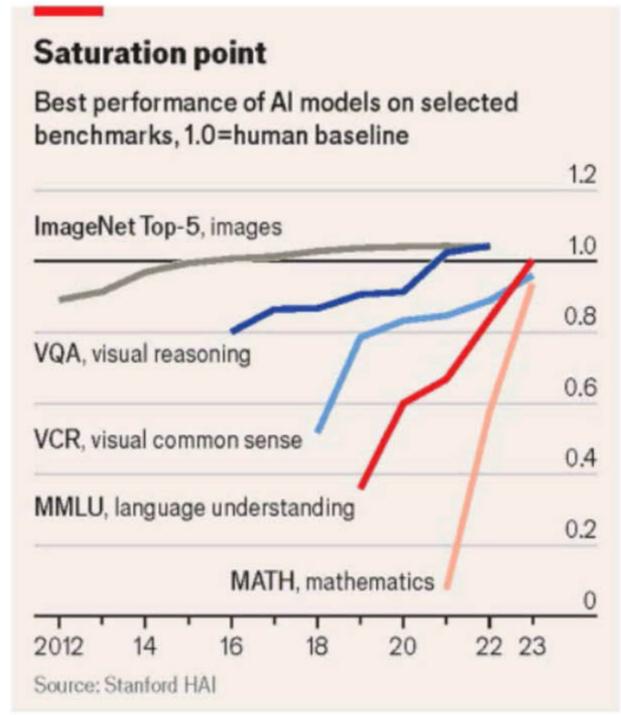
WHEN META, the parent company of Facebook, announced its latest open-source large language model (LLM) on July 23rd, it claimed that the most powerful version of Llama 3.1 had “state-of-the-art capabilities that rival the best closed-source models” such as GPT-4o and Claude 3.5 Sonnet. Meta’s announcement included a table, showing the scores achieved by these and other models on a series of popular benchmarks with names such as MMLU, GSM8K and GPQA.

On MMLU, for example, the most powerful version of Llama 3.1 scored 88.6%,

against 88.7% for GPT-4o and 88.3% for Claude 3.5 Sonnet, rival models made by OpenAI and Anthropic, two AI startups, respectively. Claude 3.5 Sonnet had itself been unveiled on June 20th, again with a table of impressive benchmark scores. And on July 24th, the day after Llama 3.1’s debut, Mistral, a French AI startup, announced Mistral Large 2, its latest LLM, with—you’ve guessed it—yet another table of benchmarks. Where do such numbers come from, and can they be trusted?

Having accurate, reliable benchmarks for AI models matters, and not just for the bragging rights of the firms making them. Benchmarks “define and drive progress”, telling model-makers where they stand and incentivising them to improve, says Percy Liang of the Institute for Human-Centred Artificial Intelligence at Stanford University. Benchmarks chart the field’s overall progress and show how AI systems compare with humans at specific tasks. They can also help users decide which model to use for a particular job and identify promising new entrants in the space, says Clémentine Fourier, a specialist in evaluating LLMs at Hugging Face, a startup that provides tools for AI developers.

But, says Dr Fourier, benchmark scores “should be taken with a pinch of salt”. Model-makers are, in effect, marking their own homework—and then using the results to hype their products and talk up



▶ their company valuations. Yet all too often, she says, their grandiose claims fail to match real-world performance, because existing benchmarks, and the ways they are applied, are flawed in various ways.

One problem with benchmarks such as MMLU (massive multi-task language understanding) is that they are simply too easy for today's models. MMLU was created in 2020 and consists of 15,908 multiple-choice questions, each with four possible answers, across 57 topics including maths, American history, science and law. At the time, most language models scored little better than 25% on MMLU, which is what you would get by picking answers at random; OpenAI's GPT-3 did best, with a score of 43.9%. But since then, models have improved, with the best now scoring between 88% and 90%.

This means it is difficult to draw meaningful distinctions from their scores, a problem known as "saturation" (see chart on previous page). "It's like grading high-school students on middle-school tests," says Dr Fourrier. More difficult benchmarks have been devised—MMLU-Pro has tougher questions and ten possible answers rather than four. GPQA is like MMLU at PhD level, on selected science topics; today's best models tend to score between 50% and 60% on it. Another benchmark, MuSR (multi-step soft reasoning), tests reasoning ability using, for example, murder-mystery scenarios. When a person reads such a story and works out who the killer is, they are combining an understanding of motivation with language comprehension and logical deduction. AI models are not so good at this kind of "soft reasoning" over multiple steps. So far, few models score better than random on MuSR.

MMLU also highlights two other problems. One is that the answers in such tests are sometimes wrong. A study carried out by Aryo Gema of the University of Edinburgh and colleagues, published in June, found that, of the questions they sampled, 57% of MMLU's virology questions and 26% of its logical-fallacy ones contained errors. Some had no correct answer; others had more than one. (The researchers cleaned up the MMLU questions to create a new benchmark, MMLU-Redux.)

Then there is a deeper issue, known as "contamination". LLMs are trained using data from the internet, which may include the exact questions and answers for MMLU and other benchmarks. Intentionally or not, the models may be cheating, in short, because they have seen the tests in advance. Indeed, some model-makers may deliberately train a model with benchmark data to boost its score. But the score then fails to reflect the model's true ability. One way to get around this problem is to create "private" benchmarks for which the questions are kept secret, or released only in a

tightly controlled manner, to ensure that they are not used for training (GPQA does this). But then only those with access can independently verify a model's scores.

To complicate matters further, it turns out that small changes in the way questions are posed to models can significantly affect their scores. In a multiple-choice test, asking an AI model to state the answer directly, or to reply with the letter or number corresponding to the correct answer, can produce different results. That affects reproducibility and comparability.

Automated testing systems are now used to test models against benchmarks in a standardised manner. Dr Liang's team at Stanford has built one such system, called HELM (holistic evaluation of language models), which generates leaderboards showing how a range of models perform on various benchmarks. Dr Fourrier's team at Hugging Face uses another such system, EleutherAI Harness, to generate leaderboards for open-source models. These leaderboards are more trustworthy than the tables of results provided by model-makers, because the benchmark scores have been generated in a consistent way.

The greatest trick AI ever pulled

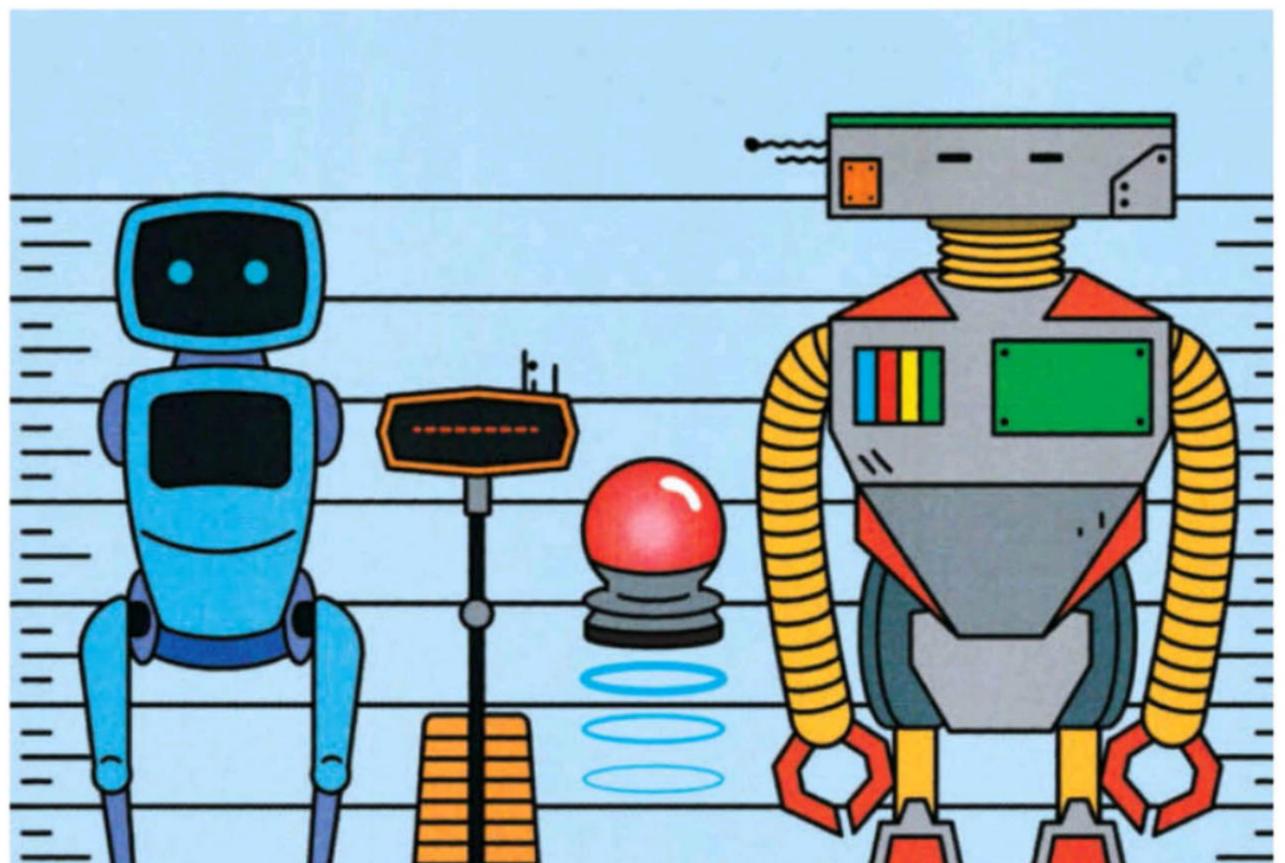
As models gain new skills, new benchmarks are being developed to assess them. GAIA, for example, tests AI models on real-world problem-solving. (Some of the answers are kept secret to avoid contamination.) NoCha (novel challenge), announced in June, is a "long context" benchmark consisting of 1,001 questions about 67 recently published English-language novels. The answers depend on having read and understood the whole book, which is supplied to the model as part of the test. Recent novels were chosen because they are unlikely to have been used

as training data. Other benchmarks assess models' ability to solve biology problems or their tendency to hallucinate.

But new benchmarks can be expensive to develop, because they often require human experts to create a detailed set of questions and answers. One answer is to use LLMs themselves to develop new benchmarks. Dr Liang is doing this with a project called AutoBench, which extracts questions and answers from source documents and identifies the hardest ones.

Anthropic, the startup behind the Claude LLM, has started funding the creation of benchmarks directly, with a particular emphasis on AI safety. "We are super-supplied on benchmarks for safety," says Logan Graham, a researcher at Anthropic. "We are in a dark forest of not knowing what the models are capable of." On July 1st the company began inviting proposals for new benchmarks, and tools for generating them, which it will co-fund, with a view to making them available to all. This might involve developing ways to assess a model's ability to develop cyber-attack tools, say, or its willingness to provide advice on making chemical or biological weapons. These benchmarks can then be used to assess the safety of a model before public release.

Historically, says Dr Graham, AI benchmarks have been devised by academics. But as AI is commercialised and deployed in a range of fields, there is a growing need for reliable and specific benchmarks. Startups that specialise in providing AI benchmarks are starting to appear, he notes. "Our goal is to pump-prime the market," he says, to give researchers, regulators and academics the tools they need to assess the capabilities of AI models, good and bad. The days of AI labs marking their own homework could soon be over. ■



Culture



The literary canon

Spine-tingling

How long would it take to read the greatest books of all time?

“A PRECONDITION FOR reading good books is not reading bad ones: for life is short,” wrote Arthur Schopenhauer in 1851. People are living longer than they did in the German philosopher’s day, but the number of books has increased by a much bigger factor. His dictum ought to carry even more weight now than it did then.

In issuing it, the famously pessimistic thinker was uncharacteristically optimistic. He thought that readers could reliably discern which books deserved their time and which did not. That faith has waned. The idea of a literary canon has come under attack. Some readers would prise it open to admit more works by women and non-white authors; others would ditch the concept entirely. In the 21st century critics have lost cultural clout and the number of newspapers with book-review sections has dwindled. These days, it seems, everyone has their own personal canon.

And yet the need for winnowing persists, so much so that book recommendations seem to be almost as popular as the

books they suggest. Influencers on BookTok—a literary corner of TikTok, a video app—have replaced the credentialed judges of yore. Thousands of reviewers contribute to Goodreads, a website with tens of millions of members. Rebind, an app that is now in a test version, will let readers of classic books use artificial intelligence to question experts about the texts. *The Economist* regularly publishes book reviews and recommendations on specific subjects as well as periodical best-book lists.

Still, the number of texts that people are told they should read seems over-

whelming. One way to manage the deluge is to see where best-book lists overlap, on the theory that the books that appear most often must be really worth your while. That is what a website called thegreatestbooks.org has done. Shane Sherman, a computer programmer in Texas, has used more than 300 lists to come up with a list of lists, which he calls, not entirely seriously, the “greatest books of all time” (GBOATS).

Mr Sherman’s data set includes more than 10,000 books, ranked by how often they appear on the constituent lists. Using our interactive graphic, you can search the top 500 and sort them by decade or century of publication, year of publication, language and length.

Americans who read at least one book a year—just over half of adults—get through 11 a year on average; a typical reader would therefore need over 45 years to finish this list of 500 must-reads. To help readers spend their time judiciously, we have included roughly how long it would take to read each book using estimates provided by Harry Tong, the co-founder of howlong-toread.com, a search engine. People read at different speeds and some books are slower going than others. The data say you should be able to polish off James Joyce’s “Finnegans Wake”, ranked 325th, in 12 hours. It took one book club 28 years.

The top book on this list of lists on July 1st was “One Hundred Years of Solitude”, a pioneering work of magical realism by ▶▶

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► Gabriel García Márquez published in 1967. Mr Tong estimates that it takes only seven hours and 40 minutes of solitude to read—about average for a GBOAT. “The Great Gatsby”, a slim jazz-age tale by F. Scott Fitzgerald, ranked second, takes a mere two hours and 51 minutes.

But number three, “Ulysses”, also by Joyce, demands a commitment of nearly 15 hours. If you spend 15 minutes a day reading, as the average American does, that will take you two months, which seems like a cheeky demand for a book whose action takes place on a single day. Impatient readers may be relieved to know that there is no correlation between length and greatness.

By its nature, a list of lists reflects a cultural consensus. That makes the position of some titles all the more surprising. The highest-ranked book that is not a novel is Dante Alighieri’s “Divine Comedy”, a 14th-century poem about the author’s journey from hell, through purgatory, to paradise. It appears at number 27. The Bible, by “Unknown”, is the 34th GBOAT. “Hamlet”, the first of Shakespeare’s six entries, comes in at number 83.

Redeem one’s shelf

The Bible aside, the first non-fiction book to appear, at number 60, is “The Diary of a Young Girl” by Anne Frank, who wrote while hiding from the Nazis in Amsterdam. (She was later murdered at Bergen-Belsen, a concentration camp, in 1945.) Yet popularity can pull rank on profundity. “Harry Potter and the Philosopher’s Stone” is the 134th GBOAT, eight places higher than “The Republic” by Plato.

Most GBOATs were originally written in English and since the start of the 20th century. And the literary compass points almost due West. After “One Hundred Years of Solitude” (set in a country that resem-

bles Colombia, the birthplace of its author), nothing else both set in and by an author based in the global south appears until “Things Fall Apart”, a historical novel set in Nigeria, at number 50.

Mr Sherman’s statistical analysis also involves some old-fashioned gatekeeping, as he varies the weighting of the lists in his database. (He updates both the weightings and the rankings as new lists appear.) His adjustments seem sensible. He subtracts points from lists that use books only published over short time periods, for example, or that focus on tomes from one region. Alongside the GBOATs Mr Sherman has devised a “global literary canon”, which limits each country to three books and imaginative literature to 80% of entries.

Yet readers hungry for self-improvement as well as entertainment may yearn for the bracing smack of 19th-century-style prescriptiveness, the sort you would have got from Sir John Lubbock’s “One Hundred Best Books”, a version of which was published in 1887. Homer, Virgil and St Augustine appear on Lubbock’s list. (They’re all GBOAT authors, too.) The spirit of Lubbock, described as the “godfather” of best-books lists, lives on in the syllabuses of great-books courses at some universities.

For Schopenhauer, shunning whatever is popular was an important part of reading wisely: “You should remember that he who writes for fools always finds a large public.” That is probably too dogmatic for the BookTok generation. But the more tempered advice of C.S. Lewis, a scholar of literature and author of “The Chronicles of Narnia” series for children, is worth heeding: “It is a good rule, after reading a new book, never to allow yourself another new one till you have read an old one in between.” If you’re reading mainly GBOATs, the odds are it will be time well spent. ■

A memoir of China

The empire strikes back

At the Edge of Empire. By Edward Wong. Viking; 464 pages; \$32. Profile; £25

MANY OF THE too many books published about China focus on the economic, political and military details of the country’s rise. In an absorbing new memoir, Edward Wong takes a different tack. He explores the country through a triple prism of history, geography and ancestry.

Mr Wong’s father, Yook Karn, and his uncle, Sam, were born in Hong Kong before the second world war, and spent part of their childhood in southern China. After Sam left for graduate school in America in 1948, Yook Karn moved to Beijing in 1950 to serve the revolution. Party leaders were in the process of putting back together the empire of the Qing dynasty, which had collapsed in 1911. Yook Karn was posted as a soldier to Xinjiang, in the north-west.

The book chronicles the shattering of his idealism as Mao Zedong purged the heroes of the revolution, and starvation set in during the Great Leap Forward. For all the party leaders’ language of transformation, they were, he discovered, just “heirs to the imperium”. Yook Karn fled first to Hong Kong, then to America in 1962. The author was born there a decade later.

When Mr Wong moved to China in 2008 as a correspondent for the *New York Times*, he dug into his family history. He visited his father’s village and felt the pull of Confucian family ties that bind within China and beyond. He also sensed how they hinder the individualism that has allowed his relatives to flourish in the West.

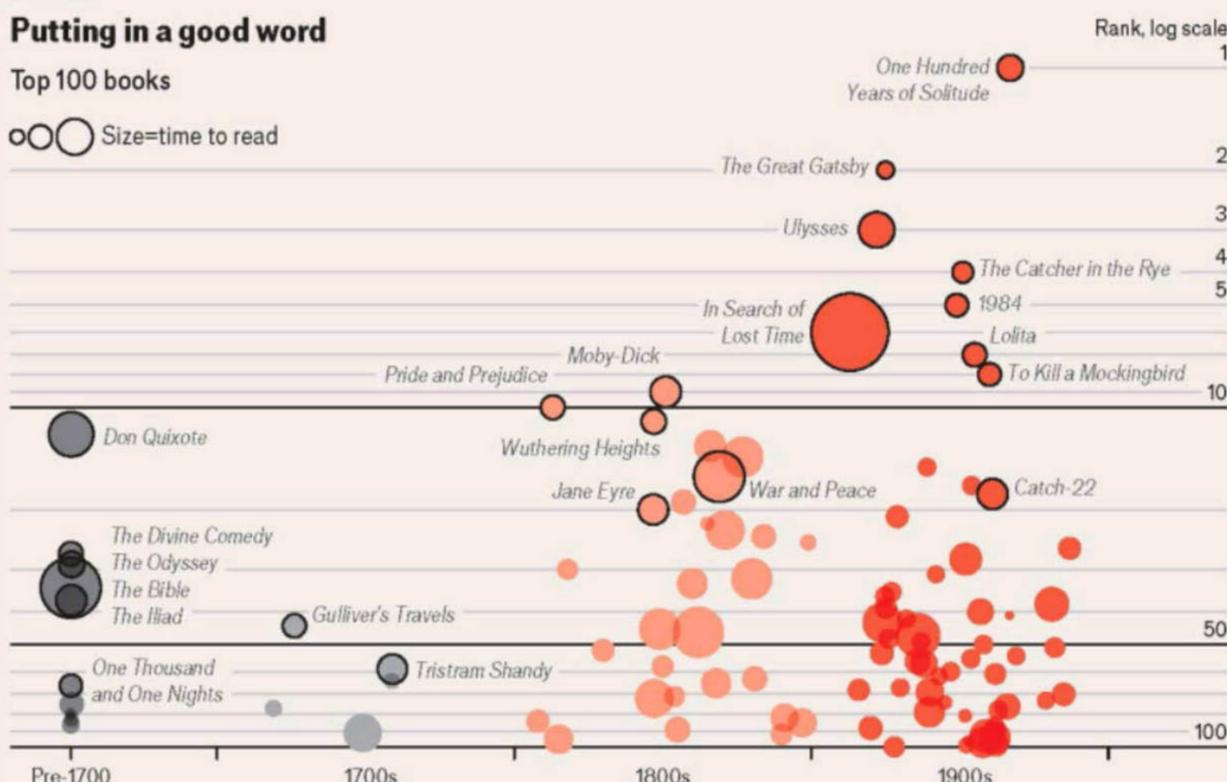
He travelled to “the fraying seams of the empire” to which his father was posted. In Xinjiang, Tibet and Hong Kong, he saw how different cultural, religious and colonial histories create resentment towards Beijing, bringing crackdowns in their wake. “Beijing defined itself through its command of the frontiers,” Mr Wong writes.

The stories are beautifully told and expose the contradictions of modern China. The empire of the title is ever-present; so is the catharsis of the book’s subtitle: “A family’s reckoning with China”. Yook Karn and Sam want their homeland to succeed, and they can see it becoming wealthy and strong. But always, in the back of their minds, is the struggle with the forces that caused them to leave in the first place. Emigration provided space for that reckoning. For those unable to leave, it is harder. The empire usually wins. ■

Putting in a good word

Top 100 books

○ ○ ○ Size=time to read



Sources: Shane Sherman, thegreatestbooks.org; Harry Tong, howlongtoread.com

The Olympics

Finding the beat

NEW YORK

The Paris Olympics are breaking's one shot to become a global sport

“WE SEE BREAKDANCING as a future Olympic sport and ourselves as pioneers in making this dream a reality.” So proclaimed the New York City Breakers, a dance group, in 1984. Forty years later, on August 9th and 10th, 32 breakers—known also as B-boys and B-girls—will grace the stage in the Place de la Concorde in Paris.

Breaking has broken into the Olympics; it is the only new event at this year's games. (The term “breakdancing” was coined by journalists and is not used by adherents.) Yet despite its physicality and emphasis on dance “battles”, breaking has tended to wear the label of “sport” uneasily. Practitioners are generally more interested in gold chains than gold medals.

Indeed breakers never seriously sought a place at the games. They will compete thanks to the World DanceSport Federation (WDSF), the body recognised by the International Olympic Committee (IOC) to oversee dance. In the past the WDSF focused its efforts on getting ballroom dancing into the Olympics and in 2014 hired Jean-Laurent Bourquin, a former IOC official, as a consultant, in part to further its ambitions. Mr Bourquin says he suggested the WDSF deliver what the Olympics were seeking: an event that would appeal to young viewers. (The WDSF declined to comment on Mr Bourquin's account, citing confidentiality agreements.)

Television viewership of the games has

been on the wane for years: a trend the IOC is keen to reverse, as it makes around 60% of its revenue from broadcast rights. In recent years the games have tried to attract new audiences with extreme sports such as climbing and skateboarding; last year it even formed a commission to consider e-sports. Breaking offers the benefit of being both visually impressive and easy to follow. It was included in the Youth Olympic Games in Buenos Aires in 2018, where it was a popular success.

Many breakers have been unenthusiastic about the Olympics. Some dancers have taken umbrage with the judging criteria. Others have worried that breaking culture will be misrepresented in the tournament. The dance emerged in black and Latino communities in the Bronx in the 1970s, but quickly spread internationally thanks to films such as “Breakin’” (1984). The brief boom in “breaksploitation” movies made dancers wary of appropriation by outsiders and too much mainstream attention, says Joseph Schloss, a historian and B-boy.

A few have been critical of what they see as a ballroom-dance organisation pushing into breaking. In a petition from 2017 breakers accused the WDSF of trying “to exploit breaking as a Trojan horse to get its foot in the door of the Olympics”.

But plenty of breakers have recognised the upsides of the Olympics. Asian and European athletes have often had state or local-government support, but American breakers have had to rely on rare corporate allies such as Red Bull, an energy-drink company. Now firms including Nike and Ralph Lauren are sponsoring dancers; Nike recently announced a breaking shoe. The games will expose a generation of young people to the dance. “What's happening right now is what our dream was,” says David “Kid David” Shreibman, a B-

boy who will be commentating in Paris.

The flips and freezes may be fleeting, however. Breaking will not return in Los Angeles in 2028. The IOC's charter caps the number of athletes at 10,500; any new event excludes others. Host cities have the final say over their games and organisers in LA opted to include larger and better-funded sports such as baseball and cricket, which bring with them vast audiences and lots of corporate sponsorship (which is important, given the games are projected to cost around \$7bn).

What matters to breakers now is leveraging the publicity from Paris to bring more money into the sport. Dancers are optimistic. “It's just going to be less of a struggle for everybody,” says Logan “Logistx” Edra, one of four American breakers going to the games. Medal or not, that is a prize worth competing for. ■

The RNA revolution

A mighty molecule

The Catalyst. Thomas Cech. W.W. Norton; 304 pages; \$28.99 and £23.99

WHAT YOU see depends on how you look. For years students of cell biology were taught that a molecule called RNA was but a humble minion assisting its glamorous cousins, DNA and proteins. DNA acted as the library of all knowledge about how to build an organism and proteins the means by which that organism was built. RNA, by contrast, was seen as a messenger boy, carrying copies of DNA's blueprints to the cellular workshops where proteins were forged; a porter, toting the amino-acid links of protein chains to those workshops for assembly; and a part of the fabric of the workshops themselves.

But, like someone staring at a Necker cube, biologists now realise that this picture can be viewed another way—one that puts RNA centre stage. Their shift of perception has followed the gradual realisation that RNA has a far wider range of jobs in cells than previously understood. Indeed, it seems likely that RNA actually predates the other two members of the trio as the original molecule of life itself.

All this is the subject of Thomas Cech's new book, “The Catalyst”. The author is well placed to describe how this perceptual shift happened, given that he was one of the early dissenters who brought it about. In the 1980s he championed the idea that RNA molecules can also act as enzymes—that is, as catalysts for biochem-



Getting a kick out of the Olympic stage



ical reactions—a claim which flew in the face of the conventional wisdom that only proteins could perform such manoeuvres. In 1989 he shared the Nobel chemistry prize for the discovery of what his team dubbed “ribozymes”.

The particular ribozymal activity Dr Cech’s team found was an “autocatalytic” rearrangement of an RNA molecule (the actual discovery was made by Paula Grabowski, a graduate student). The molecule was destined to become part of a ribosome—as the protein workshops are properly called—and part of the molecule cut out another, redundant, part. That may sound trivial. But it blew the enzymes-are-always-proteins dogma out of the water.

Similar discoveries by other labs quickly followed, as did other types of ribozyme which did different jobs. Indeed it turned out that the RNA in ribosomes is not just structural, but also catalytic. It is this, not a ribosome’s protein component, which does the work of adding amino acids to a growing protein chain.

That discovery, in particular, excited scientists seeking life’s origin. The complex arrangement whereby proteinaceous enzymes (which orchestrate a cell’s chemistry) are encoded by DNA (which does the information storage) could not have appeared from nothing. But if RNA can do both jobs (which it can), then the earliest critters may have relied on it alone. Only once RNA-based organisms were up and running, the thinking now goes, was information storage then handed over by evolution to DNA (which is more stable than RNA) and catalysis to proteins (the chemical complexity of which permits a bigger range of enzymes), with RNA assuming its current roles linking these other two types of molecules.

The number of known links is multiplying. Since Dr Cech’s original discovery, many other types of RNA have manifested themselves, involved either in gene regulation or in protecting cells against viral infection. This growing list affords medical and biotechnological opportunities. About half of antibiotics, for example, work by gumming up the RNA in bacterial ribosomes while leaving that in humans unharmed. This is a promising starting-point in the search for new drugs.

RNA can also work to silence disease-causing genetic mutations. Scientists can craft versions of RNA that pair up with, and disable, RNA messengers from the mutated DNA section. RNA messengers have also been used to create covid-busting vaccines and may soon be deployed against other diseases, including certain types of cancer. And RNA is a crucial element of the modern suite of gene-editing techniques that began with CRISPR-Cas9. Not a bad record, then, for what was once molecular biology’s also-ran. ■



World in a dish

Swimming against the tide

NEW YORK

Tinned fish—once a staple of wartime diets—is a hit on social media

MEI LIAO pulls back the can’s lid to reveal sardines swimming in a garlic and herb butter. In other videos she stuffs russet-coloured smoked mackerel into a sandwich or arranges sprats with capers and cucumber. Ms Liao says tinned fish is often considered “akin to cat food or bunker food”. But, posting as @daywithmei, she has turned it into a viral treat: her videos have millions of views on TikTok.

The canning process was invented during the Napoleonic wars. Fresh food was in short supply, particularly for those on military and naval expeditions, and so foods preserved in jars became essential sources of sustenance. Later, during the second world war, tinned fish became a staple part of diets. For a long time this gave any food packed in aluminium or steel connotations of hardship. But now tinned fish is back: on social media, on restaurant menus and in Gen Z’s cupboards. What changed?

The product itself, for starters. Canned fish has been part of the Iberian food scene since the 19th century: shops across Portugal are dedicated to the vibrantly coloured cans. Becca Millstein encountered artisanal tinned fish, such as *pulpo en aceite de oliva* (octopus in olive oil), while studying in Europe. Realising that American equivalents were “frozen in the 1960s”, she co-founded Fishwife, a food company, in 2020. Stockists are popping up to meet gourmands’ demands. The Fantastic World of the Portuguese Sardine opened

in Times Square in New York last summer. The shop offers more than 30 varieties of tinned fish, including eels and whelks.

Patrick Martinez founded The Tinned Fish Market, a British online-delivery business, in 2018. “I remember doing farmers’ markets and people getting upset because our sardines were £3 [\$3.90]”, over five times the cost of supermarket tins. Yet “The pandemic changed our appreciation of food,” he says, as people had more time to indulge and experiment with unfamiliar flavours. Now high-end products are his company’s main draw. In America, too, sales of premium tinned fish—anything exceeding \$5 a tin—are growing at triple the rate of the broader market.

Branding is an important part of the revival. Ms Millstein credits much of Fishwife’s success to social media; the company targets Gen Z and millennial consumers online. Videos of influencers unboxing retro-looking tins are both fun and helpful. Many people do not know what to do with something like tinned sardines, Ms Liao says, and some worry about choking on the bones. Watching instructional videos makes it “less scary” for the uninitiated.

Tinned fish may be paving the way for cans’ comeback: there are more than 335m posts on TikTok related to “Spam food”. A new generation of consumers has peeled away unflattering assumptions about preserved foodstuffs and highlighted their convenience. Time to stock up. ■

James Baldwin at 100

A mountainous legacy

Few American writers have seen their country more clearly than James Baldwin

IN THE MONTHS after a young black man in Ferguson, Missouri, was shot by a white policeman in 2014—galvanising the Black Lives Matter movement—no prominent African-American writer was invoked more often on social media than James Baldwin. That was no surprise: Baldwin was an eloquent civil-rights activist, whom the FBI watched anxiously and who counted Martin Luther King junior and Malcolm X among his friends. Yet as Robert Reid-Pharr, a professor at New York University, jokes: “James Baldwin never wrote a sentence of 140 characters, ever.”

Though Baldwin, who would have turned 100 on August 2nd, wrote elegantly direct sentences, his prose was subtle and often baroque—unlike the sort found on X. Venerating Baldwin for his activism risks overlooking what made him unique as a novelist and essayist. His fiction depicted African-American life with more honesty and complexity than any writer who preceded him. He influenced legions of writers, including Maya Angelou, Toni Morrison and Ta-Nehisi Coates.

The centenary of Baldwin's birth is being marked in America and Britain with festivals and books analysing his legacy. Colm Tóibín, a celebrated Irish novelist, has written a book called “On James Baldwin”. Vintage, a publisher, has released new editions of three of Baldwin's best works. All this is testimony to Baldwin's status as one of the most important, perspicacious writers of the past century.

Baldwin was born in 1924 in Harlem to Emma Berdis Jones, who, like many African-Americans in the early 20th century, had left the rural south for the industrial north. His stepfather was a labourer and Baptist minister. Baldwin was reading literature by the age of ten and preaching by 14. Also around that age, as he put it, he fell “in love” with a male school friend, without “the faintest notion of what to do about it”.

He did not go to university, but found his way into writing. He published his first essay, a review of Maxim Gorky's stories, in the spring of 1947, when he was living a bohemian life in Greenwich Village. Like many young writers, he was trying to work out who he was and what he had to say. In his case, that meant wrestling with his sexuality and with what it meant to be black in America. “I don't like people who like me because I'm a Negro,” he wrote in the introduction to his first book of essays. “Nei-

ther do I like people who find in the same accident grounds for contempt.”

To him, well-meaning liberal condescension and racist hate were two sides of the same coin: both saw African-Americans not as individuals, endowed with the same constellations of virtues and flaws as anyone else, but as objects of pity and scorn respectively. One of Baldwin's earliest reviews heaped scorn on “Uncle Tom's Cabin” for precisely that reason. Baldwin felt “protest novels”—meaning novels written with an explicit political purpose—fail as art because of their “rejection of life, the human being, the denial of his beauty, dread, power, in [their] insistence that it is his categorisation alone which is real and which cannot be transcended”.

Everybody knows his name

Despite his power as an essayist, his heart lay in fiction. Baldwin's career as a novelist did not bear real fruit until he left America for Paris in 1948. As he put it later in his life, one reason he left is because “Nothing worse could happen to me there than had already happened here.” He would travel between the two countries for the rest of his life, calling himself a “commuter” rather than an expatriate. Abroad he felt freer to delve into his inner world, an essential requirement for any novelist, but he could not abandon his family or the struggle for civil rights back home.



James Baldwin, eyes wide open

The church and sexuality would form the cores of his two earliest, and best, novels. In “Go Tell It on the Mountain” (1953) the protagonist, John Grimes, struggles with his faith, but also experiences a quasi-religious epiphany and displays tremendous promise as a preacher—all of which were true of Baldwin himself. The author recognised that the church provides comfort, structure and meaning to many, even as he also understood how religion could provide cover for sin. The book ends with John insisting: “I was saved. I was *there*.”

“Giovanni's Room”, published three years later, in 1956, concerns a young white American named David and his tempestuous affair with Giovanni, an Italian bartender he meets at a Parisian gay bar. (The inspiration for Giovanni was Lucien Happersberger, a Swiss boy, just 17, whom Baldwin met at a gay bar in Paris. Baldwin called him “the love of my life”.) Through David, who was engaged to the long-suffering Hella, Baldwin criticises the strictures of what he called the “paralytically infantile” ideal of American masculinity.

The book was daring for its time. Baldwin's publishers at Knopf told him it “will ruin your career” and declined to publish it. Fortunately the Dial Press was not quite so spineless, and the book was released to largely favourable reviews.

Aside from a superb film version of “If Beale Street Could Talk” in 2018, Baldwin's novels have rarely been adapted for the screen. And they are less often taught in schools than they were in the late 20th century: the ecclesiastical concerns of “Go Tell It on the Mountain” are more and more remote to an increasingly secular country, and the sexuality in “Giovanni's Room” and “Another Country” too raw for an era of curriculum battles.

Despite his ambitions as a novelist, Baldwin found the most fame—and certainly the most lasting influence—as an essayist. Though his essays were often discursive in subject, sentence by sentence they have a pithiness and power well-suited to social media. One oft-reposted line comes from a piece he wrote for the *New York Times* in 1962, as the civil-rights movement was gathering steam, about the writer's social role: “Not everything that is faced can be changed; but nothing can be changed until it is faced.”

His work is an appeal to an individual's conscience—a theme also appropriate for the social-media age, in which displaying the correct moral stance supersedes the grinding political work of building coalitions across ideological lines. Baldwin was unblinking, but deeply patriotic, and resistant to sectarianism or contempt. “I love America more than any other country in the world,” Baldwin wrote early in his career, “and, exactly for this reason, I insist on the right to criticise her perpetually.” ■

Economic & financial indicators

| | Gross domestic product | | | | Consumer prices | | | | Unemployment rate | | Current-account balance | | Budget balance | | Interest rates | | Currency units | | |
|----------------|-----------------------------|--------------------|------------------|------|-----------------------------|-----|-------|------|-------------------|------|-------------------------|------|-----------------|--------|-----------------------------|-------|------------------------|--|--------------------------------------|
| | % change on year ago latest | | quarter* 2024† | | % change on year ago latest | | 2024† | | % | | % of GDP, 2024† | | % of GDP, 2024† | | 10-yr gov't bonds latest, % | | change on year ago, bp | | per \$ Jul 31st % change on year ago |
| United States | 3.1 | Q2 | 2.8 | 2.2 | 3.0 | Jun | 3.0 | 4.1 | Jun | -3.3 | -6.9 | 4.1 | 12.0 | - | - | - | - | | |
| China | 4.7 | Q2 | 2.8 | 4.7 | 0.2 | Jun | 0.4 | 5.0 | Jun [§] | 1.2 | -4.5 | 1.9 | 5 [§] | -60.0 | 7.23 | -1.1 | -1.1 | | |
| Japan | -0.7 | Q1 | -2.9 | 0.8 | 2.9 | Jun | 2.4 | 2.5 | Jun | 3.2 | -4.8 | 1.1 | 46.0 | 150 | -5.6 | -5.6 | | | |
| Britain | 0.3 | Q1 | 2.9 | 0.6 | 2.0 | Jun | 2.8 | 4.4 | Apr ^{**} | -2.8 | -4.2 | 4.1 | -27.0 | 0.78 | nil | nil | | | |
| Canada | 0.5 | Q1 | 1.7 | 1.8 | 2.7 | Jun | 2.5 | 6.4 | Jun | -0.7 | -1.2 | 3.2 | -34.0 | 1.38 | -4.3 | -4.3 | | | |
| Euro area | 0.6 | Q2 | 1.0 | 1.0 | 2.6 | Jul | 2.5 | 6.4 | May | 3.1 | -3.1 | 2.3 | -18.0 | 0.92 | -1.1 | -1.1 | | | |
| Austria | -1.1 | Q1 | 0.7 [‡] | 0.5 | 3.0 | Jul | 3.5 | 5.0 | May | 2.9 | -2.4 | 2.8 | -31.0 | 0.92 | -1.1 | -1.1 | | | |
| Belgium | 1.1 | Q2 | 0.8 | 1.2 | 5.5 | Jul | 3.5 | 5.9 | May | -0.6 | -4.6 | 2.9 | -25.0 | 0.92 | -1.1 | -1.1 | | | |
| France | 1.1 | Q2 | 1.1 | 1.2 | 2.6 | Jul | 2.6 | 7.4 | May | -0.2 | -5.2 | 3.3 | 45.0 | 0.92 | -1.1 | -1.1 | | | |
| Germany | -0.1 | Q2 | -0.3 | 0.3 | 2.6 | Jul | 2.6 | 3.3 | May | 6.6 | -1.5 | 2.3 | -18.0 | 0.92 | -1.1 | -1.1 | | | |
| Greece | 1.9 | Q1 | 3.0 | 2.4 | 2.5 | Jun | 2.9 | 10.6 | May | -5.8 | -1.3 | 3.3 | -43.0 | 0.92 | -1.1 | -1.1 | | | |
| Italy | 0.9 | Q2 | 0.7 | 1.0 | 1.7 | Jul | 1.3 | 6.8 | May | 1.1 | -5.2 | 3.7 | -43.0 | 0.92 | -1.1 | -1.1 | | | |
| Netherlands | -0.6 | Q1 | -2.0 | 0.1 | 3.5 | Jul | 3.4 | 3.6 | Jun | 8.6 | -1.4 | 2.6 | -24.0 | 0.92 | -1.1 | -1.1 | | | |
| Spain | 2.9 | Q2 | 3.3 | 2.4 | 2.9 | Jul | 3.0 | 11.7 | May | 2.3 | -3.5 | 3.2 | -30.0 | 0.92 | -1.1 | -1.1 | | | |
| Czech Republic | -0.2 | Q1 | 1.2 | 1.3 | 2.0 | Jun | 2.3 | 2.9 | Jun [‡] | 0.4 | -2.5 | 3.7 | -34.0 | 23.5 | -8.0 | -8.0 | | | |
| Denmark | 1.3 | Q1 | -5.4 | 1.4 | 1.8 | Jun | 1.7 | 2.9 | Jun | 9.5 | 1.6 | 2.3 | -43.0 | 6.90 | -2.0 | -2.0 | | | |
| Norway | -0.8 | Q1 | 0.7 | 1.0 | 2.6 | Jun | 3.3 | 4.2 | May ^{**} | 15.9 | 12.0 | 3.5 | -31.0 | 10.9 | -7.4 | -7.4 | | | |
| Poland | 2.0 | Q1 | 2.0 | 2.9 | 4.2 | Jul | 3.8 | 4.9 | Jun [§] | 0.5 | -5.4 | 5.4 | -5.0 | 3.97 | 0.5 | 0.5 | | | |
| Russia | 5.4 | Q1 | na | 2.9 | 8.6 | Jun | 7.3 | 2.4 | Jun [§] | 1.4 | -1.6 | 15.7 | 451 | 86.0 | 6.8 | 6.8 | | | |
| Sweden | 0.3 | Q1 | 2.9 | 0.6 | 2.6 | Jun | 2.1 | 9.4 | Jun [§] | 5.5 | -1.1 | 2.0 | -48.0 | 10.7 | -2.0 | -2.0 | | | |
| Switzerland | 0.6 | Q1 | 1.8 | 1.1 | 1.3 | Jun | 1.4 | 2.4 | Jun | 7.3 | 0.6 | 0.5 | -53.0 | 0.88 | -1.1 | -1.1 | | | |
| Turkey | 5.7 | Q1 | 9.9 | 3.0 | 71.6 | Jun | 55.8 | 7.7 | May [§] | -2.8 | -4.7 | 26.6 | 847 | 33.1 | -18.7 | -18.7 | | | |
| Australia | 1.1 | Q1 | 0.5 | 1.7 | 3.8 | Q2 | 3.4 | 4.1 | Jun | -0.5 | -1.5 | 4.3 | 34.0 | 1.53 | -3.3 | -3.3 | | | |
| Hong Kong | 3.3 | Q2 | 1.6 | 3.2 | 1.4 | Jun | 1.3 | 3.0 | Jun ^{**} | 11.2 | -2.8 | 3.2 | -74.0 | 7.81 | -0.1 | -0.1 | | | |
| India | 7.8 | Q1 | 5.4 | 6.9 | 5.1 | Jun | 4.7 | 7.9 | Jul | -0.5 | -5.1 | 6.9 | -25.0 | 83.7 | -1.8 | -1.8 | | | |
| Indonesia | 5.1 | Q1 | na | 5.2 | 2.5 | Jun | 2.8 | 4.8 | Q1 [§] | -0.3 | -2.4 | 6.9 | 66.0 | 16,260 | -7.3 | -7.3 | | | |
| Malaysia | 5.8 | Q2 | na | 4.4 | 2.0 | Jun | 2.5 | 3.3 | May [§] | 2.5 | -4.4 | 3.7 | -16.0 | 4.59 | -1.7 | -1.7 | | | |
| Pakistan | 2.8 | 2024 ^{**} | na | 2.8 | 12.6 | Jun | 14.2 | 6.3 | 2021 | -1.7 | -7.4 | 14.1 | -195 | 279 | 2.7 | 2.7 | | | |
| Philippines | 5.7 | Q1 | 5.3 | 5.4 | 3.7 | Jun | 3.4 | 4.0 | Q2 [§] | -3.0 | -5.9 | 6.2 | -24.0 | 58.4 | -5.9 | -5.9 | | | |
| Singapore | 2.9 | Q2 | 1.4 | 2.4 | 2.4 | Jun | 2.9 | 2.0 | Q2 | 19.7 | 0.1 | 2.9 | -17.0 | 1.34 | -0.8 | -0.8 | | | |
| South Korea | 2.3 | Q2 | -0.9 | 2.7 | 2.4 | Jun | 2.6 | 2.9 | Jun [§] | 2.8 | -1.6 | 3.1 | -69.0 | 1,377 | -7.4 | -7.4 | | | |
| Taiwan | 5.1 | Q2 | 0.1 | 3.3 | 2.4 | Jun | 2.0 | 3.3 | Jun | 14.2 | 0.5 | 1.6 | 47.0 | 32.9 | -4.4 | -4.4 | | | |
| Thailand | 1.5 | Q1 | 4.6 | 2.8 | 0.6 | Jun | 1.0 | 0.9 | Jun [§] | 2.4 | -3.6 | 2.8 | nil | 35.6 | -4.0 | -4.0 | | | |
| Argentina | -5.1 | Q1 | -9.9 | -3.2 | 272 | Jun | 225.1 | 7.7 | Q1 [§] | 0.2 | -0.8 | na | na | 932 | -70.5 | -70.5 | | | |
| Brazil | 2.5 | Q1 | 3.1 | 2.0 | 4.2 | Jun | 4.2 | 6.9 | Jun [§] | -1.4 | -7.8 | 12.0 | 113 | 5.65 | -15.8 | -15.8 | | | |
| Chile | 2.3 | Q1 | 7.8 | 2.7 | 3.8 | Jun | 3.8 | 8.3 | Jun [§] | -3.2 | -2.3 | 6.2 | 73.0 | 945 | -11.2 | -11.2 | | | |
| Colombia | 0.9 | Q1 | 4.4 | 1.1 | 7.2 | Jun | 6.7 | 10.3 | Jun [§] | -2.7 | -5.8 | 10.4 | 34.0 | 4,059 | -4.3 | -4.3 | | | |
| Mexico | 2.2 | Q2 | 0.8 | 2.1 | 5.0 | Jun | 4.4 | 2.6 | May | -0.6 | -5.0 | 9.8 | 95.0 | 18.6 | -10.4 | -10.4 | | | |
| Peru | 1.4 | Q1 | 3.2 | 2.7 | 2.3 | Jun | 2.5 | 5.3 | Jun [§] | -0.4 | -4.1 | 7.0 | 18.0 | 3.72 | -3.2 | -3.2 | | | |
| Egypt | 2.2 | Q1 | na | 2.4 | 27.5 | Jun | 29.0 | 6.7 | Q1 [§] | -4.2 | -5.0 | na | na | 48.6 | -36.3 | -36.3 | | | |
| Israel | -0.4 | Q1 | 14.4 | 1.3 | 2.9 | Jun | 2.8 | 3.2 | Jun | 6.3 | -6.8 | 4.9 | 112 | 3.76 | -2.7 | -2.7 | | | |
| Saudi Arabia | -0.8 | 2023 | na | 1.0 | 1.5 | Jun | 2.0 | 3.5 | Q1 | -0.3 | -2.2 | na | na | 3.75 | nil | nil | | | |
| South Africa | 0.5 | Q1 | -0.2 | 1.1 | 5.0 | Jun | 4.8 | 32.9 | Q1 [§] | -2.0 | -5.2 | 9.4 | -81.0 | 18.2 | -2.2 | -2.2 | | | |

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

Markets

| In local currency | Index | % change on: | |
|-------------------------|----------|--------------|---------------|
| | | one week | Dec 29th 2023 |
| United States S&P 500 | 5,522.3 | 1.8 | 15.8 |
| United States NAScomp | 17,599.4 | 1.5 | 17.2 |
| China Shanghai Comp | 2,938.8 | 1.3 | -1.2 |
| China Shenzhen Comp | 1,610.8 | 4.2 | -12.4 |
| Japan Nikkei 225 | 39,101.8 | -0.1 | 16.8 |
| Japan Topix | 2,794.3 | nil | 18.1 |
| Britain FTSE 100 | 8,368.0 | 2.6 | 8.2 |
| Canada S&P/TSX | 23,110.8 | 2.1 | 10.3 |
| Euro area EURO STOXX 50 | 4,872.9 | 0.2 | 7.8 |
| France CAC 40 | 7,531.5 | 0.2 | -0.2 |
| Germany DAX* | 18,508.7 | 0.7 | 10.5 |
| Italy FTSE/MIB | 33,763.9 | -2.1 | 11.2 |
| Netherlands AEX | 920.6 | 1.9 | 17.0 |
| Spain IBEX 35 | 11,065.0 | -1.3 | 9.5 |
| Poland WIG | 84,345.7 | -0.2 | 7.5 |
| Russia RTS, \$ terms | 1,137.5 | nil | 5.0 |
| Switzerland SMI | 12,317.4 | 0.9 | 10.6 |
| Turkey BIST | 10,638.6 | -3.2 | 42.4 |
| Australia All Ord. | 8,320.4 | 1.4 | 6.3 |
| Hong Kong Hang Seng | 17,344.6 | 0.2 | 1.7 |
| India BSE | 81,741.3 | 2.0 | 13.2 |
| Indonesia IDX | 7,255.8 | -0.1 | -0.2 |
| Malaysia KLSE | 1,625.6 | 0.3 | 11.7 |

| | Index | % change on: | |
|-----------------------|-------------|--------------|---------------|
| | | one week | Dec 29th 2023 |
| Pakistan KSE | 77,887.0 | -1.9 | 24.7 |
| Singapore STI | 3,455.9 | -0.1 | 6.7 |
| South Korea KOSPI | 2,770.7 | 0.4 | 4.3 |
| Taiwan TWI | 22,199.4 | -2.9 | 23.8 |
| Thailand SET | 1,320.9 | 1.8 | -6.7 |
| Argentina MERV | 1,481,853.0 | -6.3 | 59.4 |
| Brazil BVSP* | 127,651.8 | 1.0 | -4.9 |
| Mexico IPC | 53,094.0 | -0.1 | -7.5 |
| Egypt EGX 30 | 29,378.8 | 1.0 | 18.0 |
| Israel TA-125 | 1,998.0 | -3.2 | 5.9 |
| Saudi Arabia Tadawul | 12,109.5 | 0.1 | 1.2 |
| South Africa JSE AS | 82,765.1 | 2.7 | 7.6 |
| World, dev'd MSCI | 3,571.6 | 1.6 | 12.7 |
| Emerging markets MSCI | 1,084.8 | 0.2 | 6.0 |

US corporate bonds, spread over Treasuries

| Basis points | Dec 29th | |
|------------------|----------|------|
| | latest | 2023 |
| Investment grade | 111 | 154 |
| High-yield | 368 | 502 |

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

Commodities

| The Economist commodity-price index 2020=100 | % change on: | | |
|--|--------------|-----------|-------|
| | Jul 23rd | Jul 30th* | month |
| Dollar Index | | | |
| All items | 129.4 | 127.4 | -4.0 |
| Food | 140.8 | 139.1 | -1.4 |
| Industrials | | | |
| All | 119.9 | 117.7 | -6.5 |
| Non-food agriculturals | 134.5 | 134.6 | -0.7 |
| Metals | 116.2 | 113.4 | -8.2 |
| Sterling Index | | | |
| All items | 128.8 | 127.6 | -5.2 |
| Euro Index | | | |
| All items | 136.3 | 134.7 | -4.6 |
| Gold | | | |
| \$ per oz | 2,388.1 | 2,390.2 | 2.6 |
| Brent | | | |
| \$ per barrel | 80.9 | 78.5 | -9.8 |

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

Edna O'Brien

The writer whose books shocked Ireland died on July 27th, aged 93



THEY BURNED her book. Priests denounced it from the pulpit; in her hometown they burned it in the parish grounds, after the rosary. Some people, Edna O'Brien's mother told her, had even fainted as it was burned. That must have been the smoke, she had retorted. There was no shortage of people telling her how angry everyone was. Some said they wanted to lynch her. One said there would be a stoning next. The local postmistress said she should be kicked naked through the town. Later, she wished she had queried that one: why "naked"?

The Catholic Church wasn't much of a one for nudity in the 1960s. Or for her books, which also had nudity in them. Not to mention sex and breasts and gussets and sinful black knickers—and sinful married men who slipped their hands into them. "The Country Girls", one archbishop said, was "filth" which "should not be allowed inside any decent home". It was "a smear on Irish womanhood", while she herself was "corrupting the minds of young women". The Irish Censorship Board banned her novel upon publication. She even had her own books confiscated from her: when she arrived in Dublin Airport, customs officials seized the copies that she had in her suitcase. She was furious; less at the prudishness than the price: she'd just lost £5-worth of books.

There hadn't been many books at home. Her mother thought that the written word was sinful. The only real books in the house were prayer books and a cookery one: "Mrs Beeton's Book of Household Management". It had recipes for boiled cabbage and an egg-yolk stain on the pages. Growing up in her small Irish village she managed to get hold of only one novel: a copy of Daphne du Maurier's "Rebecca" which had circulated around Tuamgraney—but by the page, and not in order. One day you might get page 204; and the next day, the first: "Last night I dreamt I went to Manderley again." She herself dreamed of writing—much to the distress of her mother. When her first book came out, her mother had blacked out the rude words in good, thick ink, then hidden it.

Catholicism would steal words from her—but first it steeped her in them. In the beginning, for her, were its words. She grew up with the Bible and with the psalms; with Church Latin and with "amo, amas, amat"; with Ave Marias and with the words of the

monthly Irish *Messenger*. The *Messenger* cost three pence and had a picture of the blood-red, sacred heart of Jesus on the cover. It brought the Good News of the world to come to the people of Tuamgraney, and bad news from the world beyond. It warned of the influx of "hot rhythm dance bands" and of the red ruin of communism. She liked it because it had a "Thanksgiving" column ("Bleeding from nose stopped, Success of school in needlework examination...Gangrene averted"). The local mothers liked it because if you rubbed Jesus's sacred heart with a wet finger, the ink came off and could be used as rouge (another red ruin).

Its words would rub off on her own fingers, too. For the rest of her life whatever she wrote would be filled with a similar blend of the sacred and profane; with convent-educated girls who prayed to the name of Jesus then swore with it; who said "Christ" and "ee-jit" and "arse"; who handled wicked black brassières with pale, pure, rosary-bead fingers; then used those fingers to do very impure things with older men.

Her mother was appalled by her writing. She had always feared bodily defilement in all its forms: after male guests left, she used to smell the cushions to see if they had farted, then aired the seat covers all night if they had. She had lived in fear of hell, which was as real to her as the turf in the fire. Sometimes, if a sod fell from it, her mother would catch it with her bare hands, to test her strength for the future flames of eternity.

She feared her daughter would end in them. She had always wanted her to put the harness on her imagination and on her heart. But Edna did neither. First she fell in love with one of the nuns at her school (she too, she vowed, would become a nun and sleep by her beloved in a hair shirt, on iron springs, immune to passions). Then she fell in love with the works of James Joyce (she too would write such luminous, labyrinthine sentences).

And then she fell in love with her future husband, another writer. They fled from Ireland—that land of strange, throttled, sacrificial women—and eloped, ending up in a mock-Tudor house in London. She made him toast and Earl Grey tea and sponge cakes, and made herself look like a happily married wife. In the quiet moments, she wrote her first novel and wondered how long her own throttled, sacrificial life would last.

The answer came when she gave him the manuscript of "The Country Girls" to read. When he finished it he said: "You can write and I will never forgive you." Nor, after it was published, would many others: she was a "Jezebel", said some; she was a "nymphomaniac", said others.

But she was feted as well: Philip Roth was an admirer; Richard Burton rang the doorbell and popped in to recite Shakespeare; Marlon Brando dropped by one evening for a glass of milk. That evening was chaste—but there were affairs, too. Male writers leered: a *Vanity Fair* profile called her the "Playgirl of the Western World" and noted in prose less good than hers that "her breasts abound" (in what, was not clear). The women's libbers tutted: all this writing about love and mistresses was not liberating.

She did not care. She didn't feel strongly about the things that they felt strongly about. She felt strongly about childhood and truth and lies and about the real expression of feelings and about love. Her loves didn't last—but her love of writing did. To the end of her life, she would retain that urgency to write; to make out of nothing some little thing. Perhaps the two were related. For who would go through the terrible purgatory of writing if they were not lonely? In the end, for her, was the word. ■