

# The Economist

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Germany reinvents itself

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Congress rolls up its sleeves

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Spending the Gulf's oil wealth

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Why Russia will miss its émigrés

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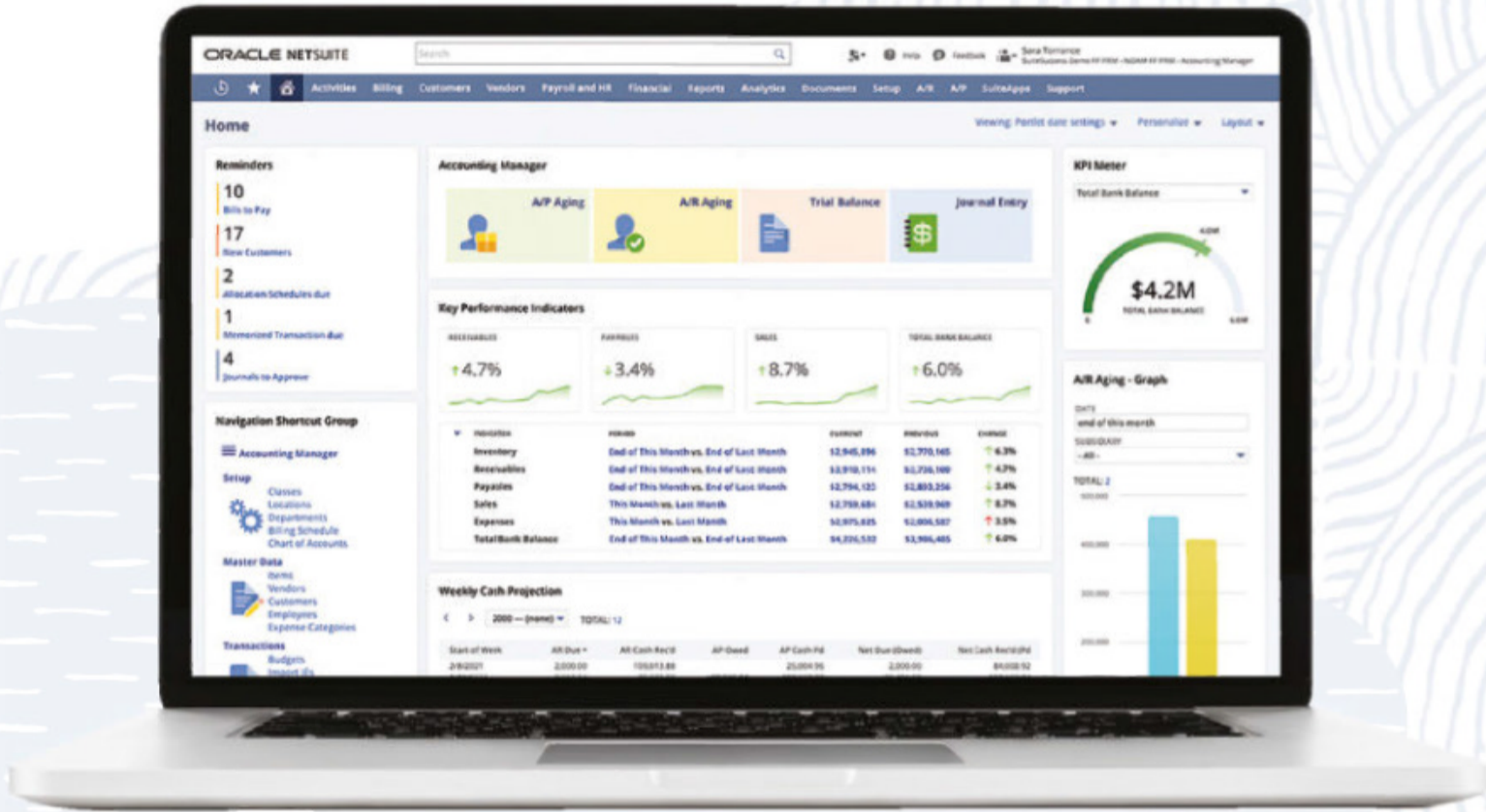
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Delivering  
for America



After months of gridlock, America's Senate passed a giant spending bill focusing on climate change, health care and tax reform. In a big advance for Joe Biden's green agenda, families and companies will be given incentives to buy electric cars and energy-efficient appliances, and clean-energy generation will be expanded. On health, the government will be allowed to negotiate lower prices with drug firms, which will benefit the elderly. The tax reforms include a 15% minimum corporate tax based on income reported to shareholders. Named the **Inflation Reduction Act**, it is anything but. Still, it is a win for Mr Biden, a year after the demise of his larger \$3.5trn spending bill.

### Nowhere to hide

The FBI searched Mar-a-Lago, **Donald Trump's** home in Palm Beach, apparently looking for documents he took from the White House. Mr Trump complained: "Nothing like this has ever happened to a President of the United States before." (Which is true.) Republicans vowed to investigate the investigators, should they win the mid-term elections in November. Democrats were torn between applauding the investigation and fretting that it might make Mr Trump look, to his fans, like a martyr.

Indiana's legislature approved a near-total ban on **abortion**, making it the first state to do so since the Supreme Court struck down *Roe v Wade*, which had created a federal right to abort. However, other Republican states are hesitating to enact similar bans, which are often unpopular.

For three days the **Israeli** air force hit members of Palestinian Islamic Jihad in **Gaza**, killing two of its commanders and, according to Palestinian sources, leaving at least 42 other people dead, including 15 children. Israel, which suffered no losses from hundreds of missiles fired by the jihadists, said it was acting pre-emptively to forestall planned attacks. Hamas, the Islamist group that controls Gaza, kept out of the fray. Egypt helped secure a ceasefire.

**Kenyans** voted for a new president. The race appeared to be close. William Ruto, the deputy president, squared off against Raila Odinga, an opposition leader running for a fifth time. Mr Odinga sought to assemble an old-fashioned ethnic coalition; Mr Ruto made extravagant promises to Kenya's have-nots.

Antony Blinken, America's secretary of state, outlined the Biden administration's new strategy for engaging with **Africa**, which will focus on promoting democracy. Speaking in Pretoria, South Africa's capital, he argued that poor governance and a lack of democracy make countries vulnerable to extremist movements and foreign influence.

A nationwide curfew was imposed in **Sierra Leone**, after demonstrations in Freetown, the capital, against high food and fuel prices turned violent and morphed into wider anti-government protests.



Gustavo Petro, a former member of the M-19 guerrilla group, took office as **Colombia's** first left-wing president. His vice-president, Francia Márquez, is

the first black person to hold the job. At his inauguration Mr Petro urged armed groups that control parts of the country to negotiate with the government and called for an end to the war on drugs. (Colombia is the world's largest producer of cocaine.) He also sent a bill to Congress that would raise taxes on the rich.

Firefighters took five days to control a blaze at **Cuba's** largest oil-storage terminal in Matanzas, on the country's northern shore. At least one person died and 14 are missing. The fire, triggered by lightning, destroyed four tanks. It caused a water shortage that led to the shutdown of a power plant nearby. Even before the disaster Cuba was suffering from fuel shortages and blackouts.

The fallout from the **assassination of Abe Shinzo**, a former prime minister, continued to rock Japanese politics. Kishida Fumio, the current prime minister, drew flak for his party's dealings with the Unification Church, a religious group that raises money energetically from its adherents. (Mr Abe was murdered by a man with a grudge against the church.) Ministers with ties to the church, including Mr Abe's brother, were dismissed from the cabinet.

At least eight people were killed amid the worst rain-storm to hit **Seoul** in 80 years. Some districts in the South Korean capital registered 50cm (20 inches) of rain in a day.

James Marape won re-election as prime minister of **Papua New Guinea** after an election marred by violence and widespread fraud. Mr Marape has an 18-month grace period before he can face a no-confidence vote.

**China** ended its military drills around **Taiwan**, but vowed to keep patrolling the Taiwan Strait. The exercises followed a trip to Taiwan by Nancy Pelosi, the speaker of America's House of Representatives. She is the highest-ranking American

official to visit the island, which China claims, since the 1990s. After Ms Pelosi left, China fired missiles over Taiwan and encircled it, as if practising a blockade.

Volodymyr Zelensky said that Ukraine's war with Russia could not end until **Crimea**, which Russia annexed in 2014, is liberated. The Ukrainian president was speaking after explosions rocked a Russian air base in Crimea, destroying several military planes. Russia blamed exploding ammunition. Ukraine did not claim responsibility. Russian holidaymakers, who are still being allowed to travel to Crimean resorts, fled from beaches nearby.

The flow of **Russian energy** to Europe was disrupted once again. This time shipments of oil through the Druzhba pipeline to the Czech Republic, Hungary and Slovakia were halted, ostensibly because of a row over payment.

### Wheat tolerant

More ships laden with **grain** and sunflower oil set sail from Ukraine under a deal guaranteeing safe passage that was brokered by Turkey and the UN. Two were bound for Turkish ports, the others for China and Italy.

The British government published its legal case against plans by **Scotland's** first minister, Nicola Sturgeon, to hold a second referendum on independence. Its case reiterates that Scotland does not have the power to call a vote. Ms Sturgeon hopes to get round this by claiming that the vote will be advisory. The British Supreme Court will hear arguments in October.

A British ultramarathon runner ran the width of **Ireland**, the first person to do so in under 24 hours. Robert Pope, 44, started his 211km (131-mile) run with a glass of Guinness in Galway, and finished it with another pint of the black stuff in Dublin.



America's annual rate of **inflation**, measured by the consumer-price index, dropped to 8.5% in July, from 9.1% in June. Petrol prices explained the dip. The average price of a gallon of car fuel is now just under \$4; in mid-June it was around \$5. The economy is also cooling, shrinking by 0.9% at an annual rate in the second quarter after a contraction of 1.6% in the first. The labour market is still red hot, however. Employers created 528,000 jobs in July, many more than had been expected.

The deputy governor of the **Bank of England**, Sir Dave Ramsden, said that interest rates would probably have to go up again to tame inflation. The bank recently lifted its benchmark rate by half a percentage point, to 1.75%, the biggest rise since 1995. The move was criticised by some for increasing the possibility of recession, but the bank faces a tricky balancing act. Not all inflation is within its control. One forecast reckons the average annual energy bill will jump to over £4,400 (\$5,320) early next year.

The plunging value of investments at its two tech-focused Vision Funds pushed **SoftBank** to a ¥3.2trn (\$23bn) quarterly net loss, a record for the Japanese conglomerate. The rout in tech shares was not all to blame. The weakened yen led to a ¥820bn foreign-exchange loss. "The world is in great confusion," said Son Masayoshi, SoftBank's boss. SoftBank later said it would reduce its stake in Alibaba, which it has held for 22 years, from 23.7% to 14.6%, which should raise around \$34bn.

**Berkshire Hathaway** reported a net loss of \$43.8bn for the second quarter, reflecting this year's broad decline in stock-markets. However, operating income, which excludes the effects of market vicissitudes on Berkshire's share portfolio, surged to \$9.3bn.

Inflation hasn't put people off visiting **Disney's** theme parks, which notched up their best-ever quarter in sales. Customers are also signing up to Disney+ in droves. The streaming service added 14.4m users over the past three months, bringing the total to 152.1m.

**Last year's thing**

The share price of Novavax plummeted after it forecast a slowdown in revenue because of falling demand for its **covid-19 vaccine**. Moderna recently wrote off \$500m-worth of vaccines that have gone unused.

**Elon Musk** sold almost \$7bn-worth of the stock he holds in Tesla, leaving him with a stake of around 15%. Mr Musk sold \$8.5bn-worth of his shares in April, as he pulled together financing for his takeover of **Twitter**. He now wants to walk away from that deal. Mr Musk may well keep the proceeds

from his latest sale of stock in reserve in case a judge forces him to buy the company. Meanwhile, the war of legal words between Mr Musk and Twitter continued, with the platform describing his reasons for terminating their agreement as "implausible".

A former employee of Twitter, who worked for the company between 2013 and 2015 overseeing media tie-ups in the Middle East, was found guilty of **spying for Saudi Arabia**. The man, reported to hold American and Lebanese citizenship, struck up a friendship with an aide to Muhammad bin Salman, the kingdom's de facto ruler, and repeatedly divulged the personal information of anonymous Saudi dissidents who use Twitter.

The declining value of cryptocurrencies lay behind a \$1.1bn net loss at **Coinbase**, America's largest digital-currency exchange. Bitcoin is now trading around \$24,000. That is up from \$19,000 in mid-June, but still down by 50% since the start of the year.

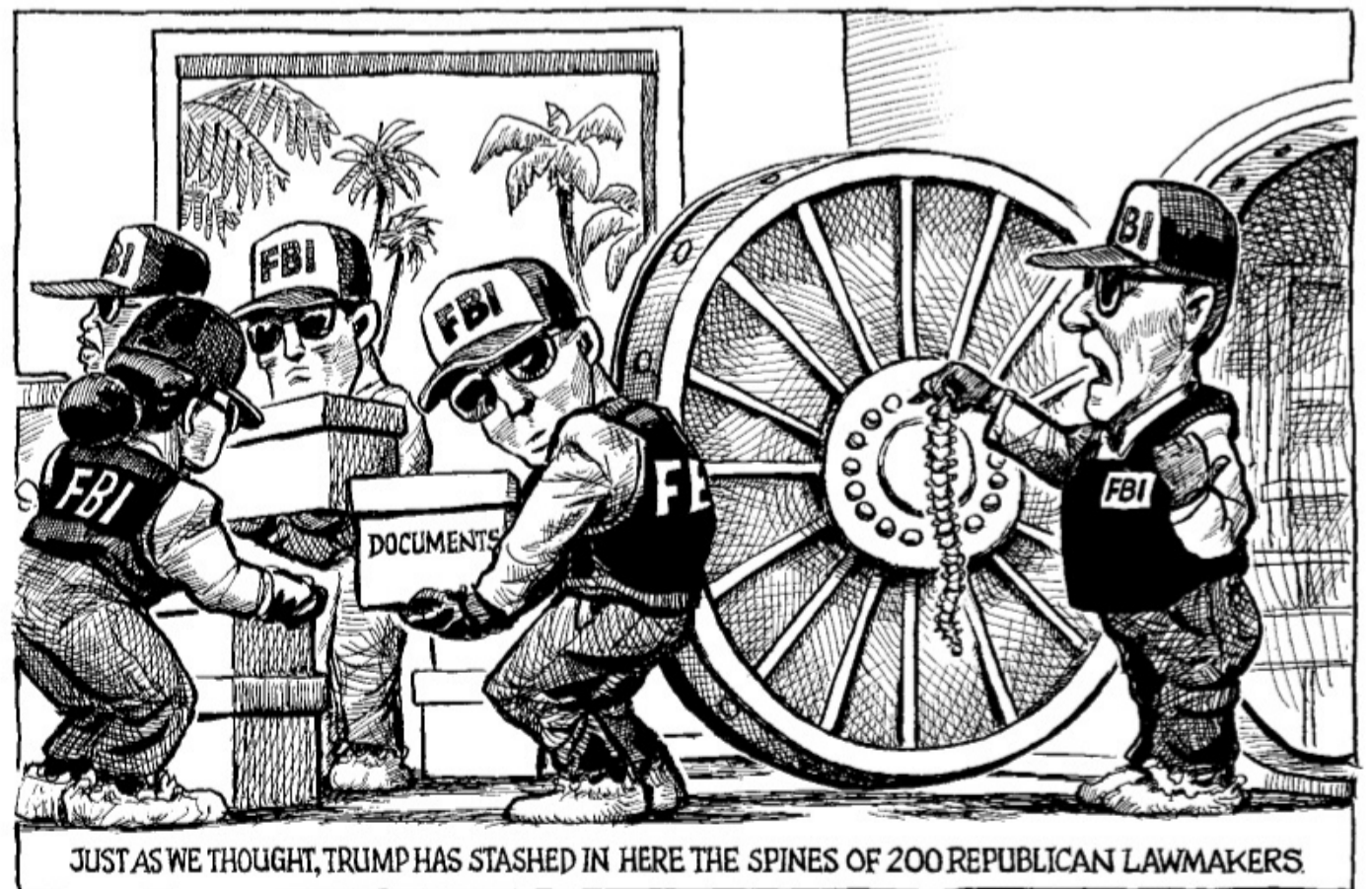
An easing of covid quarantine rules for travellers to Hong Kong helped boost revenue at **Cathay Pacific** in the first half of the year and narrow its

losses. The airline has urged the city's government to end restrictions completely. Still, Cathay is in much better shape than in recent years, when it became entangled in rows over democracy protests and endured severe pandemic curbs on flying. Its share price is up by a third this year, the best performance of any big airline.

**Amazon** bought **iRobot**, the company that makes the Roomba robot vacuum cleaner. The Roomba collects data not just dirt, which is the acquisition's real value to Amazon. It maps the layout of a house and furniture as it busily picks up dust, information that can be added to a user's shopping profile (customers can opt out of the mapping system). Questions about privacy have already been raised.

**Arrivederci**

It emerged that **Domino's Pizza** has pulled out of Italy, seven years after opening branches in the home of pizza. It had been pushing its Texas BBQ and pineapple-topped offerings in 29 locations, but quicker than you can say *prosciutto e funghi* Italian pizza chains signed up to Deliveroo and other apps to offer their own home-delivery services.



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# Target: Taiwan

**Preventing a war over the island is becoming increasingly difficult**

AMERICA AND China agree on very little these days. Yet on the subject of Taiwan, at least in one regard, they are in total harmony. The status quo surrounding the self-governing island, which China claims and whose thriving democracy America supports, is changing in dangerous ways, say officials on both sides. War does not look imminent, but the uneasy peace that has held for more than six decades is fragile (see China section). Ask them who is at fault, however, and the harmony shatters.

That much is clear from the crisis triggered this month by a visit to Taiwan by the speaker of America's House of Representatives, Nancy Pelosi. She was well within her rights, but her trip was provocative. It infuriated the Chinese Communist Party. One of Ms Pelosi's predecessors had visited the island in 1997, but China's top diplomat claimed that American "saboteurs" had wrecked the status quo. After Ms Pelosi left, China fired missiles over the island and carried out live-fire drills that encircled it, as if it were rehearsing for a blockade.

Since the previous stand-off in 1995-96, America, China and Taiwan have all grown uneasy with the ambiguities and contradictions—the status quo, if you will—on which peace precariously rests. China, especially, has bared its teeth. If the world is to avoid war, it urgently needs to strike a new balance.

In part this reflects the breathtaking change of the past half-century. Taiwan has blossomed from a military dictatorship into a prosperous, liberal democracy of 24m people, nearly all of them Han Chinese. Its citizens are more than twice as rich as mainlanders. Their success is an implicit rebuke to China's autocratic regime, and an obvious reason for them to resist being governed from Beijing. Taiwan's president, Tsai Ing-wen, has made no formal moves towards independence, but the island is drifting away from the mainland. China's offer of "one country, two systems" has looked empty since the mainland crushed civil liberties in Hong Kong, which was given the same deal. Today very few Taiwanese say they want formal independence immediately, if only because that would surely provoke an invasion. But even fewer favour prompt unification.

America has changed, too. After intervening to protect Taiwan twice in the 1950s, it began to doubt that it was worth defending, but the island's democratic success and its importance as a source of semiconductors have upped the ante. Today allies such as Japan see resolute support for Taiwan as a test of America's standing as a dominant and dependable power in the western Pacific. America has made no formal commitment to defend Taiwan directly, adopting instead a policy of "strategic ambiguity". But amid growing Sino-American rivalry, and with politicians in Washington vying to sound tough on China, there is little doubt that America would join a fight over Taiwan today. Indeed, President Joe Biden has repeatedly said as much—though each time his staff have walked back his remarks.

But no country has done more to wreck the status quo than China. Whether peace lasts is largely up to President Xi Jinping, its strongman. He gives ample grounds for pessimism. As China has grown rich, he has nurtured an ugly, paranoid nationalism,

stressing every humiliation it has suffered at the hands of perfidious foreign powers. He has linked unification with Taiwan to his goal of "national rejuvenation" by 2049. China's armed forces have been building the capacity to take the island by force; its navy now has more ships than America's. Some generals in Washington think an invasion could occur in the next decade.

Fortunately, China's actions in this crisis have been muscular but calibrated—designed to show its anger and might, while avoiding escalation. Its forces have been deployed so as not to start a war. America has sent similar signals. It postponed a routine test launch of an intercontinental ballistic missile. And Ms Pelosi's plane took a circuitous route to Taiwan, to avoid flying over Chinese bases in the South China Sea.

The danger is that China uses the crisis to set new boundaries for its encroachments into what Taiwan considers its airspace and territorial waters. It could also attempt to impose even stricter limits on the island's dealings with the rest of the world.

That must not happen. The task for America and its allies is to resist these efforts without getting into a fight. America could start by re-establishing norms that held before the crisis. It should promptly resume military activities around Taiwan, for instance, including transits through the Taiwan Strait and operations in international waters that China claims as its own. It

could continue to expand military exercises with allies, involving them more in contingency planning over Taiwan. Japan was irked when China fired missiles into its vicinity and has indicated that it could intervene in a war, which would greatly complicate a Chinese invasion.

The aim is to persuade China that such an invasion is not worth the risk. It makes sense to use the Taiwan Policy Act (TPA), now before

Congress, to provide more training and weapons to Taiwan. But Taiwan needs a better strategy based on small, mobile arms like those Ukraine has used so well, not the costly kit favoured by its generals. The island should become a "porcupine" that would be hard for China to digest. Like Ukraine, Taiwan must also show more willingness to defend itself. Its armed forces have long been plagued by corruption, waste and scandal.

Sometimes a public stand-off with China makes sense. More often it causes a lot of trouble for very little gain. The G7 condemned China's missile-lobbing, as did Japan and Australia. But South Korea did not and South-East Asian countries have been loth to take sides. Even as it condemns China's aggression, the Biden administration should stress that it does not support formal independence for Taiwan. Congress should avoid symbolic moves that will bring few real benefits to the island, such as renaming Taiwan's representative office in Washington, currently in the TPA. Why not pass a trade deal instead?

War is not inevitable. For all Mr Xi's ambition, his priority is to keep a grip on power. If the invasion of Ukraine teaches one lesson, it is that even a supposedly easy victory can turn into a drawn-out struggle, with ruinous consequences at home. America and Taiwan do not have to prove that a Chinese invasion would fail, just cast enough doubt to persuade Mr Xi to wait. ■



## Europe

# The new Germany

Thanks to Vladimir Putin, Europe's most important country has woken up

TO BORROW A phrase from the late Emperor Hirohito, the war in Ukraine has developed not necessarily to Vladimir Putin's advantage. It has sent Finland and Sweden bolting for the cover of NATO membership. It has deepened Ukrainian nationalism, strengthened the democratic alternative Ukraine offers to Mr Putin's own tyranny, and led customers for Russia's energy to look elsewhere. It has also prodded a sleepy giant, Germany, rousing a country that has been both Russia's best partner and its worst enemy. Mr Putin's warmongering may prove to be the catalyst that turns Germany into his own nightmare: a stronger, bolder, more determined leader of a more united Europe.

Germany badly needed that prod. Complacent and just a little self-satisfied, it was late to realise how fast the world was changing around it (see Briefing). Now, however, a remarkable opportunity is within its grasp, as Germans experience a rare thing in a democracy: a consensus about the need for broad, sweeping change to the economy and security.

The clouds were long gathering. Yes, Germany boasts an enviable record as Europe's strongest economy, most stable polity and, Germans like to think, most responsible citizen. But Germany's dependence on cheap Russian fuel, carefully cultivated by Russia, has been exposed by the Ukraine war. Germans are not only vulnerable to the Kremlin's energy blackmail, but have also been bankrolling Mr Putin's invasion.

That wretched situation was a product of another of Germany's failings: a reluctance to question rosy assumptions rooted in its own happy recent history. Comforting notions, such as that trading with Russia would tame its belligerence, a theme beloved of Angela Merkel, a long-serving chancellor, allowed Germany to turn a deaf ear for too long to pleas from allies for more robust investment in its own and Europe's defence.

Germany has shied away from other challenges, too. Its economy remains over-reliant on the export of traditional engineering products where there is little room for growth, and over-reliant on one country, China, as a source of inputs and a market for its goods. Partly because of strict rules on public spending, Germany has underinvested in infrastructure; all too often its trains do not run on time. The public and private sectors are held back by the slow digitisation of services as well as a shortage of skilled workers—a harbinger of a demographic danger, as over the next decade more Germans will retire than enter the workforce.

Now a new Germany is hatching. Three days after the invasion, Olaf Scholz, then a new chancellor heading an untested coalition, gave his much-applauded *Zeitenwende* speech to the Bundestag, signalling a break with the country's post-war tendency towards pacifism. He has set the agenda for years to come.

The good news is the country's challenges are manageable. Take energy. When Mr Putin invaded, Germany relied on Russia for 55% of its gas. Doomsayers warned that supplies would be choked off, German factories would close and families would shiver in their kitchens. In fact, even as Russia's share of the German gas market has halved, stores of gas for winter are building at a normal pace. Industry says it can cut back use more than ex-

pected. Faced with higher prices and conservation campaigns, households will do the same. Germany is restarting mothballed coal-fired power plants. It will invest in renewables. It should (and probably will) extend the life of three nuclear plants that had been rashly scheduled to close. It should also lift a ban on fracking that has put its hefty reserves of shale gas out of reach.

With enough determination, other troubles have fixes, too. Mr Scholz has pledged to boost defence spending by a third—though the core budget this year is flat. New outlays will fund a sweeping equipment upgrade. He has also promised a less starry-eyed approach to foreign affairs, sending heavy weapons to Ukraine in defiance of the old pacifist taboo. His government has initiated a thorough review of relations with China, and is soon to issue a national-security strategy. Tellingly, that is Germany's first such effort at framing its own geostrategic goals.

Digitising and greening its industry and adding high-end services to the mix will be harder. The myriad companies in its *Mittelstand* could remain the bedrock of Germany's economic strength if they embraced the digital challenge. Luckily, business leaders and Mr Scholz's government both appear pragmatic. Immigration rules are being tweaked to entice more skilled workers into the country. Germany is also much more open towards deficit spending, not only at home but in Europe, too.

Its solid relations with Europe are another advantage, the result of decades of nurturing allies, including an occasionally obstreperous America. In the future, as firms look for ways to make their supply chains more robust, reliable Germany will be an attractive place to invest.

Dangers still lurk. Turkey or a second Trump administration could "defect" from the NATO alliance. Germany would then face a far more

burdensome security challenge as the alliance's second-biggest, but militarily most underpowered, member. Ramping up spending should be just the first step in a radical overhaul of a squeamish and bureaucratized army that is poorly geared to defend the more exposed countries on NATO's periphery.

Germany has wisely and consistently put Europe at the centre of its concerns. But in the face of political challenges to the EU from Poland, Hungary and, potentially, a new right-wing government in Italy, Germany has a vital role to play in holding the project together. On this, and matters such as a deeper single market, Mr Scholz should get off the back seat and sit up front.

## Which came first, the eagle or the egg?

The greatest danger, though, is that this moment is lost and Germany slips back into caution and stasis. Comprehensive change takes years and Mr Scholz is not especially popular.

Ukraine will be an early test of Germany's mettle. Though Mr Scholz's tough stance against Mr Putin still convinces most Germans, support has been softening and the cost of the war has yet to hit heating bills. If Germany were to abandon Ukraine, that would be a tragedy, for Germans as well as Ukrainians. This is a conflict over the future of a continent. It is also an opportunity for Germany to reclaim its place at the heart of Europe. ■



## The Inflation Reduction Act

# Climate policy, at last

America's green-plus spending bill is flawed but essential

**A**FTER A LONG path through Congress, a giant tax-and-spend package is on the verge of being passed by Democrats. It will be America's first significant climate law and a cornerstone of President Joe Biden's agenda. Just weeks ago the bill seemed dead, but a backroom deal brought it back to life. It cleared the Senate along party lines by a single vote. The House looks set to approve it on August 12th, after we go to press (see United States section). As a feat of legislative legerdemain, it is impressive.

What of the law itself? It has many imperfections, most of which stem from the politicking needed to keep it alive. But it also scores two big achievements—a semblance of health-care sanity and America's most serious effort yet to face up to climate change. And these easily outweigh the flaws.

The "Inflation Reduction Act" (IRA), as it is officially known, will do next to nothing to reduce inflation, especially in the short term. The name of the bill is a transparent attempt to sell it to a public worried about soaring prices.

Moreover, its provisions are a shadow of what Democrats once dreamed of. Last year they sought a \$3.5trn package that would have dramatically expanded the welfare state. But they received no Republican support and their ambitions were whittled down by two stubborn senators from their own ranks: Joe Manchin of West Virginia and Kyrsten Sinema of Arizona.

Some of the ugliest compromises were over taxes. Mr Biden had pledged to raise taxes on big companies and the very rich. This package was the perfect opportunity. One simple idea was to partially reverse Donald Trump's massive tax cuts from 2017, which would have paid for many climate and social policies.

Ms Sinema, however, rejected all such proposals. So the Democrats settled on a 15% minimum tax on profits reported by corporations with more than \$1bn in annual income. Subjecting

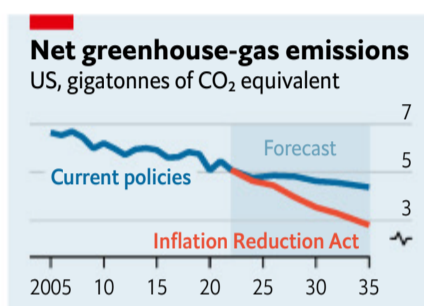
big companies to a minimum tax is an appealing idea. But levying it on their book incomes, as this new tax will do, makes a messy American tax system even messier.

Despite these drawbacks, the IRA should also be judged on two important advances. First, it will enable Medicare, the public health insurance for Americans over 65, to negotiate drug prices for the first time. This will cover just ten drugs initially, starting in 2026. But it is a step towards restraining America's health-care spending, which, at about 19% of GDP, is nearly double the average of developed countries. The pharmaceuticals lobby, usually a fearsome force, fought against the price negotiations, and lost. With any luck, it will face more such setbacks.

Second, and most crucially, the IRA marks a new chapter for America's climate policy. By weaving together a vast array of tax credits, loan guarantees and grants, it will encourage people to make low-carbon purchases, such as of electric cars, and encourage businesses to invest in green technologies. Rhodium Group, a consultancy, predicts it will cut America's net greenhouse-gas emissions by 40% in 2030 from 2005

levels. Without the IRA, the reduction would be 30%. The extra reduction is about two years' worth of British emissions. America will now be working alongside most of the rest of the world in trying to limit global warming—something that would otherwise have been in doubt.

The climate measures are far from perfect. Market mechanisms such as a carbon price or a cap-and-trade scheme underpin the energy transitions under way in many other countries. In America's current political constellation, they are, alas, non-starters. By the same token, passing any kind of ambitious legislation in that constellation is a triumph. All the more so when it promises real benefits for both America and the world. ■



## The energy crunch

# How to help with those bills

There are better, fairer and cheaper ways than meddling with prices

**T**HE ENERGY crisis unleashed by Russia's war on Ukraine is crushing Europe's consumers and panicking its politicians. Natural-gas prices are eight times higher than they were last summer and traders expect precious little respite over the coming year. Global oil prices are nearly twice their level in January 2021. The result is rampant rises in living costs. By October a household in Britain could be paying more than £3,500 (\$4,200) a year for energy, more than three times last year's bill, leading the Bank of England to warn of inflation passing 13% before the year is out. Annual consumer-price inflation rates are already in double digits in half of the euro area's member countries.

Alas, politicians are botching their response. To stop rising wholesale energy prices passing through fully to consumers'

bills, many have resorted to price caps and energy-tax reductions. Liz Truss, a Conservative politician vying to become Britain's next prime minister, is talking of cutting payroll taxes. But price ceilings do nothing to reduce energy use and tax cuts will not protect the poorest. With no immediate end to the crunch in sight, it is time for some hard-headed thinking about how to live with higher energy bills.

The cheapest protection is to trade natural gas across national borders, which IMF modelling suggests could nearly halve the blow to GDP in the worst-affected countries. Next, within domestic markets, price signals have a vital role to play in curbing demand and ensuring that precious gas gets to where it is most needed. Ceilings on the price of natural gas used by power gener- ▶▶

ators, as in Spain and Portugal, or a cap on household bills, as in France, may serve as emergency measures when a shock is fleeting. But today's scarcity is likely to be long-lasting. Consumers and businesses need to adapt.

Hearteningly, there are signs that people and businesses can and do respond to high prices by conserving energy. They are also more resilient than fearful governments might think. In Germany farmers and industrialists are importing more ammonia and other energy-intensive chemicals, rather than relying on dearer domestically produced inputs. Studies suggest that both German households and firms have reduced their consumption of natural gas since mid-2021.

Sometimes conservation can be galvanised by regulation. Spanish businesses and shops now go dark after 10pm, and the air-conditioning standards for public and commercial buildings are set at a minimum of 27°C, to encourage Spaniards to go shopping in their T-shirts. Likewise, energy companies can help change behaviour by telling people how much energy they use compared with their neighbours. Such interventions are cheap (though some have the drawback of muffling price signals), and can help defuse the incendiary politics of high prices. Affecting rich and poor alike, they are seen as fair.

But governments also need to protect those most in need, notably poor people, for whom energy bills make up a bigger share of household spending. Politicians cannot stop rising energy prices from making economies worse off, but they can determine who bears the brunt of the shock. Support, in the form of rebates on energy bills for the poorest, or even cash bonuses (as recently enacted in Italy), would help the neediest, while still encouraging consumers to conserve energy where they can.

Targeting is essential to keep the cost in check. According to the IMF, some European governments are on course to spend 1.5% of GDP on energy policies by the end of the year. Measures that protect the poorest fifth of the population would cost only 0.4% of GDP; the poorest two-fifths, 0.9%. Trying to buy support by including everyone is a bad use of public money.

### Windfall pitfall

Who, then, should pay? The crowd-pleasing choice is the energy companies, which are making out like bandits, but general taxation makes more sense. Windfall taxes on energy producers are undesirable if their fortunes follow the boom and bust of the commodities cycle. That only leads to underinvestment—and the next bout of sky-high prices. ■

## Ghana and the IMF

# Bail early, bail often

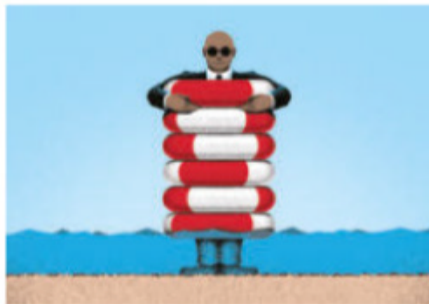
### Ghana is asking for a 17th bail-out. Surprisingly, that is a good sign

**E**VEN AFTER Ghana threw off the colonial yoke in 1957, its first president, Kwame Nkrumah, complained that it was not truly free. Rich countries still held it back, he said, and the IMF was a “neocolonialist trap”. His spirit lives on. Ghana's current finance minister likens IMF programmes to the way Israelites were treated in ancient Egypt.

All told, Ghana has spent 22 of the past 35 years under the fund's supervision. In July it asked for a new bail-out, its 17th (see Middle East & Africa section). You might think that a country that keeps asking for money is a mess. But Ghana is one of the most prosperous in the region, and a lively democracy to boot. Its problem is that its politicians, starting with Nkrumah, have been addicted to spending. The latest crisis follows a surge of borrowing and an economic crunch, which have priced Ghana out of credit markets and raised the risk of default. Given that it is only three years since Ghana completed its previous IMF programme, this suggests woeful economic management.

Yet Ghana routinely notches up impressive economic growth. At \$6,178, its GDP per head (adjusted for purchasing power) is nearly twice the west African norm. One reason it has succeeded despite its recklessness is because, largely, it has gone to the IMF early and often.

Asking for help early can nip problems in the bud. Bail-outs can be smaller and the spending cuts required to put public finances on a sound footing can be less painful. When Ghana entered its 16th programme in 2015 it needed less than \$1bn (2% of GDP) from the IMF to regain access to credit markets. When the country later issued a foreign-currency bond, investors bid for five times more than was on offer.



There are few downsides to going early. The fund's lending is usually dirt cheap (in many cases no interest is charged), and its involvement gives investors confidence to resume lending and investing. Waiting too long before calling for help, by contrast, usually multiplies a country's misery. Zambia, which failed to engage with the IMF and defaulted in 2020, now needs an IMF package worth about 7% of GDP. And because its debt is unsustainable, it needs its debt restructured with its many creditors before the IMF is allowed to lend it more. Other countries are taking note. Bangladesh has pre-emptively asked the IMF for \$4.5bn, while insisting that its economy is not in bad shape.

Ghana also illustrates the advantages of asking often. Its rulers tend to borrow and spend profligately before elections, and then ask the IMF to soothe the post-poll hangover. The fund's help is typically conditional on painful reforms that politicians know are necessary but dare not enact under normal circumstances. Such reforms are often only feasible if politicians can blame the IMF for them.

In an ideal world they would be honest with voters and embrace fiscal rectitude. In the real world the benefits of sensible reforms outweigh the harm unfairly done to the fund's reputation. The fund, for its part, has grown better at sparing essential social spending, such as on health and education. Activists are cottoning on. Bright Simons of Imani, a think-tank in Ghana, used to protest against the IMF. Now he campaigns for African countries to think of it like the family doctor. They should use its cheap loans as “preventive care”, asking for them “frequently and proactively”, before they need to be carried on stretchers into intensive care. He is right. ■

**Executive Director****Location: Kuala Lumpur, Malaysia****Contract Type: Fixed Term (3 years)****The SEACEN Centre**

The South East Asian Central Banks (SEACEN) Research and Training Centre

The SEACEN Centre (SEACEN) seeks an outstanding and experienced leader as its Executive Director for a three-year fixed term during the period from **July 1st 2023 to June 30th 2026**. The contract for the position has an option to be renewed for up to three years.

Based in Kuala Lumpur, SEACEN represents a learning and research collaboration among 19 member central banks and monetary authorities from the Asia-Pacific region. Established in 1982, the Centre has provided learning and research opportunities to generations of central bankers. SEACEN has strengthened its internal faculty of experts in central banking in order to elevate its position to become the leading regional hub for learning and research in central banking, with a focus on macroeconomic and monetary policy management, financial stability and supervision, payment and settlement systems, as well as leadership and central bank governance.

**Job Description**

The Executive Director of SEACEN heads a team of experienced staff from diverse backgrounds and nationalities, and collaborates with member central banks and international strategic partners to deliver high-impact and vibrant learning and research programmes in order to effectively build the capacity of member central banks and establish an effective platform for the building of regional views. The Executive Director will also drive organisational development strategies to ensure continuous operational efficiency and effectiveness in serving SEACEN's current and future business needs.

Reporting to Governors and Deputy Governors of its member central banks, the successful candidate is expected to contribute strategic direction and visionary leadership in raising the profile of SEACEN as the leading regional hub for learning and research in central banking.

**Desired Attributes**

The candidate must have at least master's degree qualification in core central banking areas such as macroeconomics, monetary economics, accounting, finance and banking. A Ph.D. and a good record of academic publications will be an added advantage. He or she must have at least 10 years of working experience in a senior management position in a central bank, the financial sector, a multilateral organisation or academia. Candidates with extensive experience in overseeing learning and research programmes will have a distinct advantage. He or she must have a positive and collaborative leadership style that motivates and inspires performance and excellence. Outstanding communication skills in English language and being highly result-oriented are also essential.

The position provides a competitive tax-free remuneration package and other benefits including a car with a driver, full home rental reimbursement, allowance for children's education and other allowances.

Applications, which include a curriculum vitae, should be submitted by **September 12, 2022**, to [shuhaila.ibrahim@seacen.org](mailto:shuhaila.ibrahim@seacen.org); [minh.nguyenquang@sbv.gov.vn](mailto:minh.nguyenquang@sbv.gov.vn), addressed to:

**The Chairman**  
SEACEN Board of Governors  
The SEACEN Centre  
Level 5, Sasana Kijang  
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### The OPEC Fund for International Development

The OPEC Fund for International Development (the OPEC Fund), based in Vienna, Austria, is a development finance institution established in 1976 that supports socio-economic progress in all developing countries other than its own members.

The OPEC Fund works proactively with the international donor community and provides agile solutions to the urgent needs of developing countries, helping to overcome some of the world's most pressing development challenges.

To date, the OPEC Fund has committed more than US\$22 billion to development projects in over 125 countries with an estimated total project cost of US\$187 billion.

**Our Mission:** Together, we drive development, strengthen communities and empower people.

**Our Vision:** A world where sustainable development is a reality for all.

To help maximize its development impact, the OPEC Fund is looking to engage smart individuals who thrive in an environment that values: **integrity, empowerment, innovation, community and excellence**. Some of the current job opportunities are listed below:

- Senior Policy Officer - Risk Management
- Head of Corporate Procurement - Administrative Services
- Senior Counsel - Financial Operations (Treasury and Funding)
- Senior Portfolio Management Officer - Financial Operations
- HR Analytics Specialist - Human Resources
- Talent Acquisition Specialist - Human Resources
- IT Infrastructure Specialist - Information Technology
- Business Application Specialist - Information Technology
- Syndication Facility Officer - Private Sector & Trade Finance Operations
- Country Manager - Public Sector Operation

Temporary vacancies - One year:

- HR Business Partner - Human Resources
- HR Policy Officer - Human Resources
- HR Operation officer - Human Resources

Interested applicants are invited to visit the OPEC Fund's website at [www.opecfund.org](http://www.opecfund.org) for a complete list of Job opportunities, detailed descriptions of duties and required qualifications, and information on how and by when to apply. Applicants from the OPEC Fund's member countries are especially encouraged to apply.

Due to the expected volume of applications, only short-listed candidates will be contacted.

We look forward to receiving your applications.



**Help us shape global economic thinking through better policies for better lives.**

### OECD Chief Economist

[www.oecd.org](http://www.oecd.org)

**Paris – From €163,752 (tax-free) + Benefits**

Comprising 38 member states, the Organisation for Economic Co-operation and Development (OECD) builds and promotes policies that improve the economic and social wellbeing of people around the world. Operating alongside governments, policymakers and citizens, we establish evidence-based international standards and find solutions to complex social, economic and environmental challenges.

As our Chief Economist, you will provide intellectual leadership and strategic direction to keep us at the forefront of global policy development. Focusing on key issues such as lower growth and rising inflation, you will develop innovative solutions and proposals, whilst reshaping debate via innovation and enlightenment. This will give you exceptional impact and an extremely high profile as you act as our economic spokesperson and liaise constantly with Ministers and Central Bank Governors, whilst directing the activities of your high-calibre team.

Alongside a postgraduate qualification in economics from a leading institution, you will bring an impressive record of research on global economic issues, spanning both developed and developing nations. Exceptionally adept at linking macro with structural analysis and policy, you will be skilled in delivering clear and convincing briefings, influencing key-decision makers and addressing the international media. Finally, it is essential that you are fully fluent in either English or French, with some knowledge of the other language or willingness to learn.

Full details of the position are available from [www.oecd.org/careers/vacancies](http://www.oecd.org/careers/vacancies) (ref. 15555). Applications from OECD member country nationals should be submitted online by **cob 24 August 2022**.



The International Institute for Strategic Studies



### Director of Editorial and Digital Strategy IISS, London Headquarters

The International Institute for Strategic Studies (IISS) intends to hire a full-time Director of Editorial and Digital Strategy based in its London headquarters. The selected candidate will report to the Director-General and Chief Executive overseeing the digital strategy programme across research and client delivery departments.

The IISS is the world's leading authority on international conflict and geopolitical trends. It is international in its composition, perspective and reach. The Institute provides objective facts and independent analysis for its core audiences in government, the private sector, and the expert and opinion-forming communities. Summits convened by the IISS facilitate intergovernmental consultations, while its research helps companies to understand political risk and its publications shape the international strategic debate.

**The Director of Editorial and Digital Strategy's principal responsibilities will include:**

- Devising and implementing an integrated digital transformation strategy to increase the reach of the Institute and its engagement with its target audiences.
- Managing the governance of the digital transformation programme, with transformation of the Institute's content sets as one important area of focus.
- Providing senior leadership and direction to the Editorial Services, Global Communications Engagement, and Design Services departments.
- Evaluating individual processes and projects to arrive at a clear roadmap for digital change.
- Raising awareness of the needs of digital transformation internally by engaging and influencing department leaders and colleagues at all levels across research, editorial, communications, website and design teams.
- Devising quality control measures and optimising performance where required.

The successful candidate will be a dynamic, entrepreneurial and ambitious individual, able to take on a wide variety of tasks with tact and efficiency. Relationship-building and influencing skills are also essential, as is team-management experience. The position will suit a person with strong intellectual qualifications, an interest in international affairs and an international outlook.

Salary will be commensurate with skills and experience, and will attract a pension and private medical benefits package.

Applications should include a cover letter stating the skills the candidate would bring to the IISS, a CV and list of references, and should be submitted by **Monday 15th August** via our website [www.iiss.org/careers](http://www.iiss.org/careers).

**Equitable social goals**

ESG (environmental, social and governance) investing should focus just on emissions, you say, concluding that ESG investment is an outdated and flawed idea (“Three letters that won’t save the planet”, July 23rd). ESG exists because efforts to price the planet’s boundaries and social institutions have been too little and too late to make a difference. Companies and investors alike have spent the best part of 20 years worshipping at the altar of carbon markets only to find that politics gets in the way of a sufficient price. As a result, investors have had to evaluate emissions (and other ESG factors such as board competency, transition plans and stakeholder impacts) and trade on the risk of future prices and regulation to prepare for the economic transition ahead.

ESG provides a framework to assess the interconnectedness of these issues in a way that better reflects policy and economic realities. For example, the economic transition required to reduce emissions is also an inherently social transition. Take the *gilets jaunes* protests in France, where an increase in fuel duty, nominally with the aim of curbing carbon emissions, led to months of disruptive civil unrest. No government, investor or business can consider pathways for policy reforms without considering their wider ramifications and the volatility that may result for markets. The E, S and G must be solved together.

NATHAN FABIAN  
Chief responsible investment officer  
Principles for Responsible Investment  
London

CDP runs the global disclosure system to help firms reduce their environmental impacts. I agree that it is often hard to link products to progress towards a sustainable, equitable economy through ESG investing. That is because many of its aspects are seen

through a de-risking lens, or as a niche overlay to mainstream investment products, rather than to align economic activity with what our planet can sustainably provide.

Therefore, I am deeply concerned by the suggestion to reduce ESG to emissions alone, which ignores wider environmental impacts such as water security, biodiversity and deforestation. Focusing on emissions alone will not help us to build resilience to the climate shocks coming our way. Without biodiversity humans cannot eat or make medicines. Indeed, we cannot solve the climate crisis, as at least a third of all scientifically required emission reductions are linked to forestation and the water cycle. More than half of the world’s GDP relies on nature and its services. Losing it is an existential threat. Companies and financial markets are finally waking up to this reality and we must use this momentum to regulate and standardise more, not less.

An established accounting framework for emissions already exists, and if companies generally do a poor job of reporting emissions in their value chain (scope 3) this is where the focus for improvement should lie.  
NICOLETTE BARTLETT  
Chief impact officer  
CDP  
London

The impending transformation of ESG is coming through impact investing, in which I have been intimately involved for over 20 years. I estimate that more than \$2trn of global capital is invested according to impact principles. These principles rest on transparency. The International Sustainability Standards Board, the Securities and Exchange Commission and the European Union are pushing for the standardisation of physical-impact measurements. Big data, artificial intelligence and machine learning are enabling us to measure and value physical impacts and integrate them into financial analysis and the valuation of companies.

This evolution is exemplified by the efforts of the Impact Weighted Accounts Initiative at Harvard Business School. It has published, in monetary terms, the environmental and social impacts of thousands of firms, allowing for a comparison between their different impacts and profits. Its analysis shows that a correlation exists between the higher level of pollution companies create and their lower stockmarket value relative to their less polluting competitors.

Integrating standardised impact measurement into mainstream investment practice, in the same way we did with risk measurement in the second half of the 20th century, is the path that leads ESG beyond greenwashing. By elevating ESG to a discipline focused on measuring business impacts alongside profits, we turn ESG into impact investment. Doing so revolutionises the ability of market economies to deliver solutions to our great challenges alongside rising prosperity.  
SIR RONALD COHEN  
Chair  
Global Steering Group for Impact Investment  
London

So-called “engagement” strategies, whereby investors own high-emitting companies in order to change them for the better, are not only devilishly difficult, but also beset by potential conflicts of interest. A fiduciary investor owning the likes of ExxonMobil, for example, could hardly be an effective advocate for the rapid curtailment of its oil and gas production, or for badly needed public policies that would price carbon emissions, or boost substitutes, any of which could tank Exxon’s stock. The line between engagement and complicity is a fuzzy one, if it is there at all. Or is investor engagement just another “greenwashing” to justify the opportunity to capture some juicy returns?

Also, the key goal of divestment strategies is not to drive up the cost of capital of high emitters. Instead, the idea

is to decrease the number of stakeholders in such enterprises to weaken their political power, so that proper pricing and regulation can be put in place. One need only look to the decline of the tobacco lobby, and the end of tobacco advertising, to see how things might proceed if fewer had a vested interest in continued profits from high-emitting enterprises.

Deep-pocketed investors interested in saving the planet might best be served by donating to politicians and organisations that might actually act to raise carbon prices, or accelerate the adoption of electric vehicles.  
JAMES JAMPEL  
Founder and co-chief investment officer  
HITE Hedge Asset Management  
Boston

**Preaching to the converters**

Sometimes *The Economist* can take its obsession with clarification a little too seriously. When Sajid Javid spoke of his father arriving from Pakistan “with £1 (\$1.20) in his pocket”, I died a little inside (“The British dream”, July 16th). Surely your newspaper could have discarded precision for prosody on this occasion?  
ADRIAN FOGARTY  
London

**On another planet**

Reading about the latest advances in astronomy (“I’m in heaven”, July 16th) ignites the age-old question of whether we will make contact with intelligent life. Not to burst anyone’s bubble, but as Arthur C. Clarke humbly observed: “I’m sure the universe is full of intelligent life. It’s just been too intelligent to come here.”  
DAVE GLANTZ  
Fairfax, Virginia

Letters are welcome and should be addressed to the Editor at The Economist, The Adelphi Building, 1-11 John Adam Street, London WC2N 6HT  
Email: letters@economist.com  
More letters are available at: [Economist.com/letters](https://www.economist.com/letters)



## Schafft Deutschland das?

BERLIN

**The war in Ukraine is forcing Europe's most important country to face challenges well beyond those of military prowess. They will be hard to handle**

MUCH OF GERMANY'S success in recent decades can be put down to staying the course. Even its dramas were dramas of continuity—as when, in 2015, Angela Merkel refused to change the country's asylum policy in the face of a huge influx of Syrian refugees. “Wir schaffen das,” she said as she held open the door—“We can handle this.” The much-quoted remark projected compassion and confidence while offering voters astute reassurance. Germany was strong and stable enough to cope with this extraordinary development. There would be readjustments, but no deep changes, nor serious costs.

The crisis brought on by Russia's attack on Ukraine this February is of a different order. Olaf Scholz, who took over from Mrs Merkel last December at the head of a coalition of social democrats, greens and liberals, was quick to grasp the shift. Speaking just three days after Russian tanks rolled over the border he declared the arrival of a *Zeitenwende*—a change in the spirit of the times. Germany would support Ukraine to

the hilt, he said. It would punish Russia with sanctions and pump up its own army. It would reverse its willingness—partly a policy of engagement through trade, partly opportunism—to depend on Russia for inordinate amounts of natural gas.

The tough words opened up a much wider debate on the need to part from well-worn paths, a debate in which almost nothing seems sacred anymore. The Greens in Mr Scholz's coalition seem willing to bite bullets on nuclear-power stations and coal power. Conservatives talk of releasing the deficit-spending caps that have hogtied public investment; titans of industry admit that yes, German business will sink if it does not learn to swim in new and rougher waters.

If all the rhetoric is to be believed, a new Germany is emerging: one more pragmatic and less preachy, less self-satisfied and more decisive. It promises to evolve into a more self-reliant and more assertive locomotive for an expanding European project, a global hub for new industries and green

technology and a country comfortable with asserting itself using its armed forces. If things go right, Germany's war-spurred transformation may prove one of Vladimir Putin's biggest regrets.

But that is a big if.

To be fair, not all the credit for Germany's newfound openness to change should go to Mr Putin. Pressure had been building for years. Prosperous as they were, Germans could see that their infrastructure was aching after decades of underinvestment, that their industry was overdependent on exports to China, that companies struggled to find the right staff. Many felt longer-term challenges such as climate change and keeping the pensions system solvent were being neglected.

The poor showing of Mrs Merkel's Christian Democrats in last year's election reflected the nation's accumulated impatience. The government that replaced hers is the youngest and most diverse Germany has seen. This *Ampel* (“traffic-light”) coalition, so called because of the red, yellow and green of its three parties, started with a strong agenda for domestic reform. Its talk was of a greener, highly digitised “social-market economy”. This was quickly overshadowed by the *Zeitenwende*. But elements of it are moving forward in step with the drive to improve the armed forces and reshape the energy landscape.

Six months on from the chancellor's speech, his government's record of moving ▶▶



▶ from words to deeds is not too bad. Germany has sent money and arms of its own to Ukraine's government. It has provided further money through the EU and "backfill" deals in which German arms supplied to NATO allies have allowed those allies to send more weapons to Ukraine. It is also hosting close to a million refugees. Some 150,000 Ukrainian children are now registered in German schools.

Many, though, have found fault with aspects of this response. Though Germany has sent money, others have sent more, especially when measured as a share of GDP. In Ukraine, there have been complaints that Germany was slow to get going and the long list of goodies it has given is dominated by obviously surplus and hand-me-down kit. There are signs that the German army, hollowed out by decades of under-spending, has been reluctant to part with what little it has.

That said, a plodding-but-steady approach may see Germany helping Ukraine more than most over the longer term. Military aid has certainly accelerated. The arrival this month of the first German-made mobile rocket launchers marked the most significant contribution yet from a country that for decades has routinely refused to send weapons into a war zones.

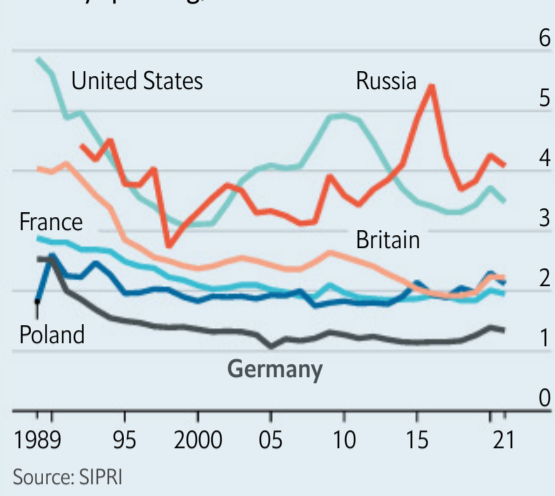
### More red balloons needed

When it comes to isolating the non-energy sectors of the Russian economy, the record is more consistent. Despite sanctions imposed following Mr Putin's annexation of Crimea in 2014, at the beginning of this year Germany remained Russia's top foreign investor, with some 4,000 German firms active there. More than 200 German firms continue to do business in Russia, including Globus (supermarkets) and Fresenius (health care). But the vast majority have now closed operations and pulled out staff, going beyond what was made necessary by new EU sanctions because of concerns about safety, deference to public opinion and a belief it was the right thing to do. This has hit investments, partnerships and sales hard, blows which have been borne with little complaint.

Politicians, too, have upped their game. The Green party has long had a strong pacifist streak, but it was nowhere to be seen when Annalena Baerbock, the 41-year-old foreign minister, one of the government's two leading Greens, told students at the New School in New York that Russia's "brutal war" is an attack on "freedom, democracy and human rights". Mr Scholz's own party was long associated with a go-softly approach to Russia. Its previous chancellor, Gerhard Schröder, in office at the turn of the century, became a lobbyist for Russian interests after leaving office. Yet the party's 44-year-old current co-chair, Lars Klingbeil, bluntly describes military force as a

### Scraping the bottom

Military spending, % of GDP



legitimate tool for peace. "It is not talking about war that leads to war," he said in a recent speech. "Closing your eyes to reality leads to war."

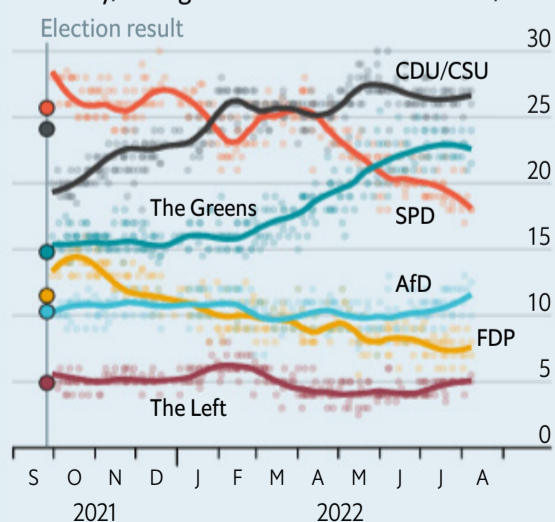
So does an unwillingness to be serious about defence. The part of Mr Scholz's speech that most heartened his NATO allies was his pledge to crank military spending up to 2% of GDP, a goal which the alliance agreed on more than a decade ago but which Germany has egregiously failed to meet. In the mid-2010s it was spending only just over 1% (see chart 1).

A special fund of €100bn (\$103bn) will be used to increase spending on the armed forces from the €51bn in the 2021 budget to an annual €80bn or so. Its first big dollops are destined for the scrawny Luftwaffe, which will be receiving 35 F-35 fighters from America in an \$8.4bn deal.

Increasing investment is not enough on its own. "It is necessary to spend a lot of money on the Bundeswehr," says Nico Lange, a former chief of staff at the defence ministry, "but what you really need to change is its bureaucratic culture." He says the army has become desk-bound. "We fuss about training Ukrainians to handle our 'advanced' weapons, when it is us who should learn from them how to improvise

### Fortunes of war

Germany, voting intention in federal election, %



on the battlefield and take the initiative."

Challenging though the increase in military ambition is, the change in energy policy carries bigger implications for the domestic economy. Mrs Merkel's various administrations not only let Russia's share of gas imports reach 55%. They also approved the sale of refineries, gas-storage facilities and other crucial infrastructure to Russian firms. They built no terminals for liquefied natural gas (LNG) tankers coming from more distant providers; they banned fracking, a technology that could have allowed Germany to exploit its own gas reserves. Market-based reforms to renewables funding damped the exponential boom of the early 2010s down into steadier, less dramatic growth. Nuclear power was phased out in an ill-thought-through response to the disaster at Fukushima.

In terms of its stated aim of using mutually beneficial trade to encourage change in Russia this was a complete bust. And it has left Germany in the embarrassing, indeed tragic, situation of funding Mr Putin's aggression. Germany's payments for fossil fuels have put some €18bn into Mr Putin's pocket since his tanks rolled into fresh parts of Ukraine on February 24th, according to the Helsinki-based Centre for Research on Energy and Clean Air.

The anticipated difficulty of weaning the country off Russian energy by the summer of 2024, as the government hopes to do, has provoked fears of catastrophic deindustrialisation and popular uprising in the press. So far, though, reductions have been faster than expected and not particularly painful. As Mr Putin has squeezed gas supplies, Germany has found various replacement sources, often by out-bidding other countries. The amount of gas coming from Russia is now just 26% of the total, according to the government. Storage facilities, which were at a very low ebb before the war, have been filled to the normal level for August. By early next year the first of five new LNG terminals should be on stream.

Reductions in demand are moving ahead. Big firms such as Mercedes-Benz and BASF, a chemicals giant, now say they can make do with a lot less gas than they initially thought; the carmaker says it has already cut its gas use by 10% and can get to 50% by the end of the year, though it does not specify how. The government plans to launch an auction mechanism that will let firms offer reductions in gas use at a specific price, allowing the government to find the most efficient options. To encourage frugality among domestic users, who are typically on long-term fixed-price gas contracts, the government will be charging a gas surcharge from October, while at the same time promising further support for the finances of hard-hit consumers.

Both industrial and household gas ▶▶

► consumption will also be cut by Germany's European neighbours (which have pledged 15% reductions). Coupled with more gas coming into Europe from sources such as Qatar, Algeria and America and a temporary switch back to coal for electricity generation that should enable Germany to get through the winter without rationing and with minimal reliance on Russian gas—say 20% of the full capacity of the Nordstream 1 pipeline. If the winter is particularly cold, though, or if flows from Russia cease completely, further measures will be needed.

The energy crunch has put a spotlight on Robert Habeck, who as vice-chancellor and minister for economic affairs is the senior Green in government. The war has provided strong tailwinds to the Greens' ambitious plans to expand renewable capacity in Germany, and Mr Habeck is using the crisis to overcome political resistance to those plans in states governed by the Christian Democrats. In July the upper chamber of parliament (in which the states are represented) approved a package of measures to speed up planning, approval and construction of green-energy projects he had brought forward.

Mr Habeck has been helped by his willingness to be pragmatic, as in the temporary reopening of mothballed coal-burning power stations. He has not yet buckled on long-standing plans to shut down the last three nuclear plants in December, a move which will reduce electricity supply by 6%. But with his own popularity high, with European allies pleading for such action and with polls showing that some 80% of Germans, including a majority of Greens, favour keeping the plants open for at least a few more months, giving in on this issue looks like a no-brainer.

Germany thus seems well on its way to expanding its roster of energy suppliers, making it less strategically vulnerable. In the long run more renewables, and a transition away from natural gas to hydrogen made by electrolysis, may make it more

self-sufficient. But with high prices for gas and also for carbon emissions (which means coal is not a cheap option) there are large near-term costs and a widespread fear that industries which have relied on cheap Russian gas, could be in real trouble.

That need not be the case across the board. As Monika Schnitzer of Munich University points out, it is relative costs that matter, more than absolute ones. "If other countries face similarly high gas prices, which in global gas markets will happen over time, production may well remain in Germany, especially of those products that use both gas and technology." But an economy with a large chemical industry and a dependence on manufacturing cannot look at higher energy prices with equanimity.

German manufacturing is no longer growing in absolute terms. But in 2019, before the pandemic, it still accounted for almost 20% of GDP, compared with 11% in America and 9% in Britain. Though economists expect the economy to shift further towards services, its industrial character will persist. As Jens Südekum of the University of Düsseldorf puts it, "Germany's services will not be the new Facebook, but rather services closely tied to manufacturing, like the internet of things."

But transforming an industrial economy requires digital skills, and there Germany has lagged behind. Mrs Merkel was calling the internet "new territory" as late as 2013. While the availability of broadband and high-speed mobile connections has improved, the integration of digital technologies into businesses or public administration remains unimpressive. A key challenge in this, as many other areas, is a lack of qualified staff. Germany's working-age population is on course to shrink faster in the current decade than that of any other major economy save South Korea. Even with high immigration, which Germany now, in another sign of its turn to pragmatism, plans to encourage, the country is

unlikely to make up for the shortfall.

Industry also faces the problem of markets for its manufactures. Russia is lost. The BDI, Germany's industry association, warned as long ago as 2019 of the need to avoid overexposure to China. And the nature of the things the world wants is changing as a result of the energy transition.

Take the beloved car industry. The agreement which saw Tesla, an electric-vehicle maker, build a factory near Berlin was hailed as a great success. But even if, despite the company's predilection for vertical integration, the factory boosts the fortunes of some suppliers, it will bring little cheer to the country's network of highly skilled engineering companies devoted to the intricacies of the internal-combustion engine. And their own car companies are moving in a Tesla-like direction—and thus in need of batteries Asia knows how to make cheaply, not fuel injectors Germany knows how to make exquisitely.

Hopes for growing tech clusters around the Tesla factory, and in the "Silicon Junction" near Magdeburg (also in the east) where Intel, an American chipmaker, is spending €17bn on a semiconductor fab, may be borne out. Further foreign investment may follow. But the economic benefits will not necessarily flow to Germany's settled manufacturers. Wrenching change of the sort the country has largely sought to avoid will be the order of the day. That said, European efforts to "friendshore" existing supply chains away from China are bound to benefit some German manufacturers.

### The importance of enemies

Germans may well forgive their politicians for privations closely connected to the war. Recent polling shows strong majorities remain in favour of sanctioning Russia and sending arms to Ukraine. But among the coalition partners only the Greens are seeing growing support. Mr Scholz's ratings and those of his party have steadily dwindled since February (see chart 2). Supporters of its third part, the Free Democrats, are increasingly defecting to the Christian Democrats. A sense of national purpose is already being undermined by squabbling as to the respective roles of the federal government and the states in reducing gas demand and the siting of wind turbines and transmission lines.

Constanze Stelzenmüller of Brookings, a think-tank, feels confident that Germany will not slump back into old habits. The *Zeitenwende* is real, she believes, and the government is working all-out to make it happen. But she adds a caution. "It is real because of Putin and the fact that he is not going to stop," she says. "If this had been a one-week war, things might be different." It may be that, for Germany to make a sustained commitment to change, a sustained challenge is needed. ■





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The Democrats' tax-and-spend bill

# And now for my next act

WASHINGTON, DC

**Joe Biden's signature legislative proposal is on track to become law, at last**

**T**HIS HAS been decades in the making, and it will reshape the decades ahead." That is how Fred Krupp, a longtime champion of congressional action on climate change as head of the Environmental Defence Fund, a green group, describes the Inflation Reduction Act (IRA). Mr Krupp and his fellow advocates have watched every bold American climate proposal of the past few decades flop. Now they have real grounds for optimism.

On August 7th the Senate passed the IRA; the House of Representatives is expected to follow suit within days. Once law, the act will shower \$369bn of subsidies and tax credits over the course of a decade on renewable energy and electric vehicles, hydrogen hubs, carbon capture and storage, and more. It is the largest package of climate spending in American history.

For months President Biden's landmark policy proposal, initially known as Build Back Better (BBB), looked doomed to fail. Only a year ago Democrats had hoped to pass a package of climate and energy policies, health-care reforms and social programmes costing \$3.5trn over a decade. It

stalled in Congress due to intransigence from the right (not one Republican senator voted for the IRA on August 7th) and was whittled down by old-style centrist Democrats, in particular Joe Manchin, a senator from West Virginia. Last month Mr Manchin appeared to scuttle BBB altogether.

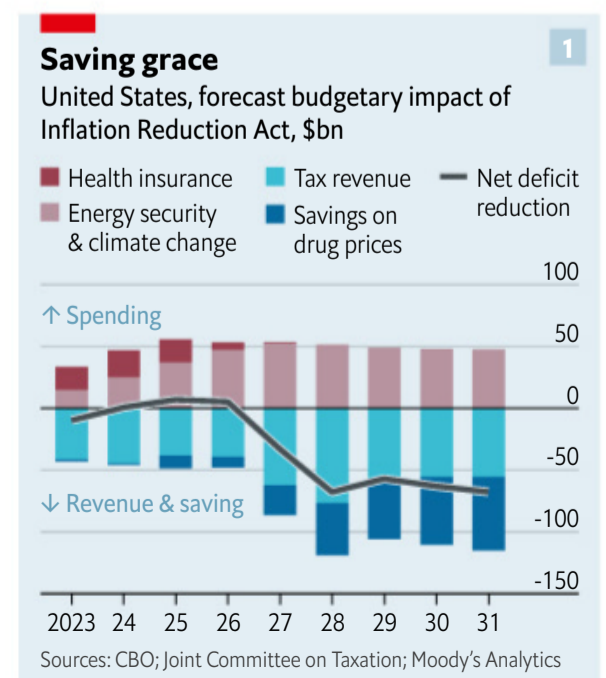
Then came the shock. On July 27th he and Chuck Schumer, the Democratic leader in the Senate, revealed that secret negotiations had led to an agreement on a slimmer version of BBB that would tackle the climate and health care, and jettison much of the rest. Besides providing green subsidies, the IRA will reduce the cost to the elderly of some prescription drugs, and raise taxes on some big American firms.

The IRA is a big deal, even if each of its victories was clinched only with big trade-offs. Start with the portion that involved some of the largest compromises: tax reforms. In Democrats' original conception of BBB, tax provisions were nearly as important as spending commitments. The goal, on which Mr Biden campaigned, was to raise taxes on big companies and the very wealthy. But that ran into opposition

from Kyrsten Sinema, a Democratic senator from Arizona, who refused to back a bill that would lead to higher tax rates.

So the party settled on a workaround: a new 15% minimum tax on book income reported by companies with profits of more than \$1bn. Many tax experts are highly critical of this new levy. Book income is conceptually different from income as reported to tax authorities; taxing two separate statements of income will add complexity to America's overburdened tax system.

Still, the tax reform deserves praise for raising much-needed revenue. Non-partisan analysis suggests it will cut the federal budget deficit by a cumulative \$300bn over the coming decade (see chart 1). The exche-



► quer may raise twice that amount from both the reform of drug pricing and imposition of the 15% tax.

That points to a second reason to applaud the IRA. For decades the only corporate lobbying group in Washington more powerful than Big Oil has been Big Pharma. During his term Mr Trump surprised many by vowing to rein in drug prices, but largely failed. Despite attempts by congressional leaders in both parties to tackle runaway drug prices, the industry undermined every big reform. No longer.

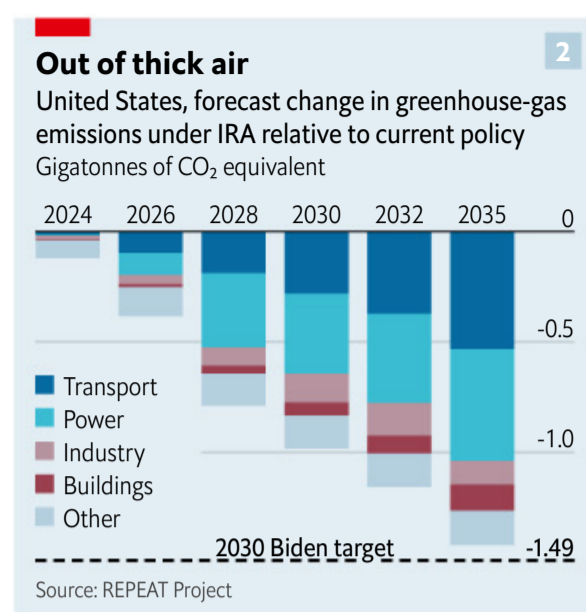
The IRA gives Medicare, the giant government health scheme for the aged, the power to negotiate the price of some high-cost drugs for the first time. If drug prices for Medicare rise faster than inflation, firms will now be forced to issue a rebate. The law will cap co-payments and eliminate co-insurance costs for Medicare recipients, and extend some health-care subsidies. Tricia Neuman of the Kaiser Family Foundation, a health-care think-tank, says it is “hard to overstate” the significance of the drugs provisions: in overcoming fierce industry opposition, achieving the first big Medicare reform in over a decade and lowering the cost of pricey drugs.

### The vote heard round the world

The third reason is perhaps the most powerful: at the heart of the IRA is a bold attempt to turbocharge America’s clean-energy transformation. True, the bill is all carrot and no stick: it lacks a national plan for carbon pricing or a mandated cap on greenhouse-gas (GHG) emissions. But an exception to that is a fee that will be levied on methane emissions from oil and gas operations. Lindsey Griffith of the Clean Air Task Force, an advocacy group, expects this relatively high fee will be “critically important” in mobilising the energy industry to tackle emissions of methane, a potent greenhouse gas.

Crucially, the IRA replaces the stop-go tax credits, which have hitherto hobbled the development of renewable energy, with tax credits that offer ten years of policy certainty. Christopher Seiple of Wood Mackenzie, a consultancy, estimates that the IRA will boost total spending on renewables by \$300bn by 2035 compared with current policies, to \$1.2trn. Well-crafted subsidies for nuclear power will extend the life of many plants, which produce carbon-free energy and a fifth of America’s power.

The upshot will be a significant reduction in climate-related emissions. Mr Biden had made a bold promise to reduce America’s GHG emissions by 2030 to half their level of 2005. The IRA alone will not fulfil that, but it will help America get most of the way there (see chart 2). Modelling by the Rhodium Group, a consultancy, finds that business-as-usual would have reduced annual emissions by a quarter to



35% in that timeframe. The new law should reduce them by about a third to 44%.

Perhaps most encouragingly, the IRA should be politically durable. Paul Bledsoe of the Progressive Policy Institute, a think-tank, reckons the ten-year tax credits are so popular with firms and investors that they are “very unlikely” to be repealed even if Republicans control the White House and Congress come 2024. The bill’s reforms enjoy broad support from voters of both parties, polling suggests; in the long run it is expected to lower households’ energy bills.

If the IRA kickstarts a clean-energy revolution at home, abroad it already signals that America takes seriously its leading role on the climate. For years, says Mr Krupp, the country was seen as “all talk and no action”. It looked set to show up empty-handed to the UN’s next climate summit, in November in Egypt. Now, hopes Heather Zichal of the American Clean Power Association, a trade group, this will be “the vote heard round the world”. ■

### Minnesota’s primaries

## Cops, robbers and votes

MINNEAPOLIS

### Crime and policing continue to split Democrats

SINCE ENTERING Congress in 2019, Ilhan Omar has become one of the best known and most divisive figures on the American left. Ms Omar represents Minnesota’s fifth district, which covers the city of Minneapolis and some of its suburbs. She came to America from Somalia as a refugee, and is one of only three Muslims in the House of Representatives. During her few years in Congress, she has picked fights with Donald Trump, who has questioned her citizenship; the American Israel Public Affairs Committee, a lobbying group that accused her of anti-Semitism; and fellow Demo-

crats including Nancy Pelosi, the House Speaker, who condemned her for equating American misdeeds abroad with those of the Taliban. All of this Ms Omar has survived and, to some extent, thrived on.

But on August 9th it was a local fight that came close to undoing her: one over policing and crime, hot issues in the primary race for nominee of the Democratic Farmer-Labour Party (DFL), Minnesota’s Democratic-Party affiliate. When protests erupted in Minneapolis in 2020 after the murder of George Floyd, a 46-year-old unarmed black man, by a local police officer, Ms Omar backed nine of the city’s 13 council members in calling for the police department to be abolished. She argued that “you can’t really reform a department that is rotten to the root”.

Ms Omar has maintained that stance—even after a referendum in Minneapolis roundly rejected a proposal last November to replace the police with a new department of public safety. Her primary rival for the DFL’s nomination, Don Samuels, is a 72-year-old former council member who, unlike Ms Omar, has almost no digital presence. Mr Samuels ran on a tough-on-crime message and, to the surprise of many, came within two percentage points of unseating her.

The tight race was just one indication of how crime and policing continue to unsettle Minnesotan politics more than two years after Mr Floyd’s murder. Minneapolis has long been one of America’s most left-leaning cities. But since the spring of 2020, violent crime has soared. In 2021 it recorded 93 murders in a population of just 425,000, double the number in 2019. Other rates of violent crime, including carjackings, have risen even faster.

Meanwhile the police, having lost many officers to early retirement, is now 100 shy of the legal minimum required by the city’s charter (Mr Samuels had led an effort to sue Minneapolis over this). Taken together, this helps explain the result of the referendum pushed by the council. Unusually among American cities, the council then held more sway than the mayor; it was subsequently stripped of many of its powers.

The DFL is now split on the issue of crime. Ms Omar won the party’s endorsement. But Mr Samuels was backed by Jacob Frey, the mayor of Minneapolis (who opposed the referendum), as well as several suburban mayors and various trade unions, which are influential in the state. Moreover, the race for the fifth district was not the only one in which crime was a central issue. For the first time in two decades, voters were asked to pick candidates for the district attorney of Hennepin county, which covers Minneapolis and a large chunk of its suburbs. The DFL-backed candidate, Mary Moriarty, is a former public defender whose campaign focused on ►►

▶ holding the police accountable. She won 36% of the vote in the primary on August 9th, a substantial plurality. Yet all six other candidates ran on a tougher message.

In November's general election, Ms Moriarty will face Martha Dimick, a black former prosecutor and judge from north Minneapolis, a largely black area. Ms Dimick says that police reform is vital, but that Ms Moriarty is too divisive to achieve it, and has lost sight of what the city needs most: a response to violent crime. "We are going to do something with these children that are running around carjacking everybody with guns," she says. Like Mr Samuels, Ms Dimick has the mayor's endorsement.

Last month the Biden administration said it had set aside funds to hire 100,000 police officers across America. The plan was immediately denounced by some on the left, including the American Civil Liberties Union, an advocacy group. As long as worries about crime stay high, it seems bound to keep dividing Democrats. ■

## Mass timber

# Seeing the wood for the trees

PORTLAND, OREGON

**A new sustainable building material may help revitalise forests**

AMERICA'S PACIFIC NORTHWEST was largely built on timber. But the industry lost an estimated \$1.8bn in 2020, so once-bustling towns are scrambling to find alternative sources of income. Some are pinning their hopes on what can be a more sustainable use of the material: "mass timber", small sections of wood held together with resin or a similar binder.

Big logging firms have pushed the small ones out of timber towns. Poorly managed wildfires have ruined trees that might have been used for products. And green groups have raised the alarm about over-harvest-

ing. Can mass timber—strong, light and fire-resistant—give the sector a boost?

Since its invention in Austria in the 1990s, mass timber has been used extensively in Europe. But it has only recently caught on in America: 1,500 mass-timber structures have been built or planned since 2015 (when the country's national building code approved the material), up from the 23 that existed in 2013. In July a 25-storey block in Milwaukee was certified as the world's tallest mass-timber building.

Such buildings are much greener to erect than those made from energy-intensive steel and concrete. Mass timber is made from new-growth trees, which are usually the result of plantings and more quickly reach their age of use. It helps keep "working forests working", says Marcus Kauffman of the Oregon Department of Forestry. Mass-timber projects are the main beneficiaries of \$32m earmarked for wood-related innovations and grants in President Joe Biden's infrastructure bill.

Sustainability is a big part of the appeal. Forests are made more resilient by cutting small trees and brush that do not have market value, says Mr Kauffman. Yet mass-timber's suitability for affordable housing and rapidly deployable shelters means the sector can expect robust demand, he says. In 2020 Oregon said the mass-timber industry presented "unique opportunities" for high-wage jobs and "statewide prosperity".

Environmentalists, including Laurie Wayburn of the Pacific Forest Trust, a conservation group, worry that a booming sector may eventually do more to degrade forests than protect them. But for now, Ms Wayburn too thinks mass timber holds "a lot of promise". The material strikes her as "a great blending of commerce and commodities and conservation". ■

Flying with guns

## Oops, I did it again

ATLANTA

**More people are trying to take their weapons on planes**

HARTSFIELD-JACKSON International Airport, south of Atlanta, is, by passenger numbers, America's biggest. Flying through it offers a quintessentially American airport experience. At the security checkpoint, where in other countries signs would remind you to discard liquids, televisions display a revolving 3D image of a handgun. Passengers are reminded in large lettering that no weapons are allowed in the concourse. For guns to be transported, they must be checked as baggage, unloaded, and locked in a dedicated container.

Atlanta's airport also holds a less desirable accolade: as the airport where the most Americans are caught trying to bring guns through security. In 2021 Transportation Security Administration (TSA) agents found 507 guns in passengers' hand luggage, a record. In the first six months of this year, another 200 were caught—a slight dip on the same period last year. More visible signage in the airport may have helped.

Across America, the number of guns found each year has been rising sharply. Occasionally weapons even scarier than guns are intercepted. In 2019 officials at Baltimore-Washington airport found a rocket launcher in the luggage of a Texan man flying home from Kuwait. In 2020, even though the number of passengers flying in America fell by 60% compared with 2019, the number of guns found

decreased by only 27%. This might suggest that quieter airports enabled agents to catch a higher share—so in normal times, a worrying number of guns may be making it onto planes. In 2021 the number of guns caught at airport checks hit a record just shy of 6,000, more than twice as many as in 2015.

According to Mark Howell, a TSA spokesman, most guns found are a case of "oops, I forgot" rather than any sinister intent. They crop up far more often in states with loose gun laws. People in Georgia or Texas often carry a gun as others carry their keys. Roughly 90% of firearms found are loaded. When passengers are stopped by TSA agents, they are fined (sometimes several thousand dollars) and handed over to police, who see if they have broken any local laws.

In Atlanta, police now simply direct passengers to return any guns to their cars, or to check them in as luggage. In April Brian Kemp, Georgia's governor, signed a "constitutional carry" law, allowing people in the state to carry a concealed weapon without a permit. As a result, local police can no longer confiscate weapons found by TSA agents at the airport, or even compel owners to submit to questioning. "We are working on it," Darin Schierbaum, Atlanta's interim police chief, told the city council in June. Some might worry it is only a matter of time before one goes off in the air.



Lodgepole pine for lodgings



### The far right

## Extreme goes mainstream

DENVER, COLORADO, AND SANDPOINT, IDAHO

**Right-wing extremists are adapting to a post-Capitol-riot America—by pushing into politics**

**A**BOUT 15 PEOPLE file into a sunny real-estate office in Denver, take their seats and face the front as if ready for a lecture. The next three hours are part sermon, part support group for conspiracy theorists. Attendees discuss events and concerns that preoccupy them. By their account, the World Economic Forum wants to lead a global government; Colorado's primary elections were rigged; the pope, and possibly Joe Biden, are holograms; and society is only ever two weeks away from collapse.

The gathering is a local meeting of People's Rights, a network for those who fear that their individual rights are being eroded by America's federal government. It is the brainchild of Ammon Bundy, a candidate for governor in Idaho who is best known for having led armed stand-offs against the federal government at his family's ranch in Nevada in 2014 and at a wildlife refuge in Oregon in 2016. The main selling-point of the group, which Mr Bundy set up in 2020, is its dial-a-militia function: if a member feels threatened, he or she can summon compatriots for help.

Charles Tappan, who led the meeting, disavows Mr Bundy, and argues that the group is more interested in preparing for three scenarios—a globalist world takeover, alien invasion or the Rapture at the end of times—than taking up arms against the feds. Yet the conspiracies being voiced in Denver are similar to the concerns of

voters who attended a recent campaign event for Mr Bundy in Sandpoint, Idaho, a small town that is an hour's drive south of the Canadian border. Here, participants complain about federal overreach, "extreme environmentalists" and the mainstream media. "Am I an extremist?" one woman asks, rhetorically. "I don't know!"

Mr Bundy's evolution from militia leader to candidate for governor reflects a merging of the far right with electoral politics. Rather than fomenting insurrection, many extremists have adopted a new mentality: if you can't beat them, join them.

### The origins of political disorder

The far right in America is a decentralised network of groups and militias, not a coherent movement. Factions differ in substance and style. The Oath Keepers recruit current and former police officers and soldiers to their ranks; the Boogaloo Bois are hostile to law enforcement; the Proud Boys are street brawlers; People's Rights often looks for justification for its actions in the constitution or religious texts. These differences affect how each group operates. People's Rights members in Denver, for example, are more likely to attend a meeting than make mischief on far-right websites such as 8kun.

Yet many militias have been inspired by the same events. A straight line can be drawn from the Sagebrush Rebellion of the

1970s to People's Rights and the attack on the Capitol on January 6th 2021. Some 50 years ago a coalition of ranchers, miners, loggers, oilmen and officials in western states were radicalised by opposition to new land-management laws that they viewed as a land grab by the federal government. Mr Bundy's father, Cliven, counted himself among those "Sagebrush" rebels. For 20 years he refused to pay fees for grazing his cattle on federal land.

In 2014, when the feds arrived to confiscate his cows, militia members from across the country assembled at Bundy Ranch to resist what they viewed as federal overreach bordering on tyranny. Jason Van Tatenhove, a former spokesman for the Oath Keepers, recently told the House committee investigating the January 6th riot that Oath Keepers were among the militants who showed up. Mr Bundy tried to replicate the stand-off two years later by occupying a wildlife refuge in eastern Oregon to protest against the imprisonment of two ranchers.

It was probably not a deep passion for ranching that brought the Oath Keepers to Nevada. Militias "are looking for the photo op where they can be in a confrontation of their choosing, on their terms", says James Skillen of Calvin University, who has written a book about the Sagebrush Rebellion and its heirs. The confrontation, he adds, should prove "that the federal government is the aggressor".

Mr Bundy keeps a small copy of the constitution in his shirt pocket, and often reads aloud from it to defend his beliefs. On a break from driving his campaign bus around Sandpoint, he explains that People's Rights aims to systematically duplicate the call-to-arms his family sent out from their ranch in 2014.

There seems to be a growing constituency for militias-on-demand, although private militias are banned in all 50 states. In 2021, one year after its founding, People's Rights boasted at least 33,400 members in 38 states, according to the Institute for Research & Education on Human Rights (IREHR), a research group that studies the far right. A chilling poll from the University of Chicago's Institute of Politics recently found that 38% of conservatives agreed it may soon be necessary to take up arms against the government.

Covid-19 provided a rare opportunity for disparate militias to rage against the same thing. Far-right groups rallied around the idea that government officials were trampling on their individual freedom by imposing mask mandates and lockdowns. Mr Bundy says that fighting pandemic restrictions was the push he needed to start People's Rights two years ago. Despite his penchant for leading armed militias against federal officials, Mr Bundy professes to be an "introvert" who ▶▶

▶ just wants to be left alone. “The covid comes around and you realise that they’re not going to leave us alone,” he says. “I would love to just stay on my property and grow my garden and take care of my family. But it’s not the first time people have had to leave the fields to go and pick up a sword.”

The Armed Conflict Location & Event Data Project (ACLED), which tracks political violence around the world, has identified nearly 4,000 protests against covid constraints across America since 2020. The extremists who plotted to kidnap Michigan’s Democratic governor, Gretchen Whitmer, in 2020 were motivated by opposition to pandemic restrictions.

Some 228 different militias, mostly right-wing, have organised 2,335 events over the past two years (see map). Many of them were protests against covid rules, or rallies for Donald Trump’s “Stop the Steal” campaign. Perhaps the most obvious foreshadowing of the riot on January 6th was the involvement of far-right extremists in at least 39 armed demonstrations at legislative facilities in the 12 months before the insurrection.

Where People’s Rights was set up to combat perceived federal overreach, other militias were formed in response to the elections of Barack Obama and of Mr Trump. Mr Obama’s ascent to the presidency, and the global financial crisis of 2007-09, agitated many white men who were angry at the ways in which America was changing. The Oath Keepers and the Three Percenters, another militia, were formed in 2009 and 2008, respectively.

Among the most striking aspects of the evolution of right-wing militias in recent years has been their rejection of anti-government principles in order to embrace Mr Trump. But Devin Burghart, the executive director of IREHR, argues that “anti-government” is a misnomer. “They have always had a vision for government,” he says, “but their vision has always been about them controlling it.”

At key moments Mr Trump gave militias the impression that someone sympathetic to their beliefs was finally in power. He said, for instance, that there were “very fine people” at a white-supremacist rally in Charlottesville, Virginia, in 2017; he told the Proud Boys to “stand back and stand by” in 2020. The insurrection on January 6th was a last-ditch attempt to keep Mr Trump in power, and thereby preserve many militias’ vision for government.

Mr Bundy was not at the Capitol on January 6th; he prefers local uprisings to the national sort. But he admits that his antics in Nevada and Oregon probably emboldened those who flocked to Washington. And the riot was useful to him. “People were going there with or without me,” Mr Bundy says. “So I said, ‘Hey, if you’re going there it’d be a great opportunity to recruit

for People’s Rights.”

January 6th marked a turning-point for far-right militias. In Nevada and Oregon the Bundys beat the charges levied against them. But hundreds of rioters have been held accountable for their assault on the Capitol. By August 10th at least 226 people had been sentenced for taking part in the attack, according to the Department of Justice. Their sentencing fed paranoia among right-wing groups, leading many to temporarily halt their protests. ACLED noted a steep decline in far-right violence after January 6th.

### Laboratories of autocracy

Extremist groups did not go completely dormant, however. Mr Burghart suggests that they reached the height of their recruiting prowess before the riot, and are now preparing for a new phase. For many, that includes taking part in mainstream politics—not from behind a police barrier, but through the ballot box.

Until recently there were two distinct wings of the far-right movement: a paramilitary cohort that uses violence and intimidation to get what it wants, and a more mainstream crowd that participates in politics. But the gap between these wings is narrowing. Mr Bundy is not the only militia leader trying to bridge the divide. Mark Finchem, who admitted to being an Oath Keeper in 2014, is the Republican candidate vying to be Arizona’s top election official. Indeed, last year a BuzzFeed News

analysis of leaked Oath Keepers records suggested that at least 28 elected officials had ties to the group.

They may not be the only ones. A recent IREHR investigation combed through the Facebook profiles of all 7,383 state lawmakers in 2021 and 2022. Researchers found that 12% of all legislators, and 22% of Republican ones, belonged to at least one far-right Facebook group.

This cohort has sponsored a smorgasbord of bills that aim to limit governments’ public-health powers and restrict voting rights, among other things. Many bills supported by these legislators have become law. And the study probably does not capture all state lawmakers with far-right views, as some may use other social-media sites or messaging services, such as Gab and Telegram.

The types of bill sponsored by far-right lawmakers provide clues to the next issue that could galvanise militias in the way opposition to covid-19 restrictions did in 2020. In June, 31 members of the Patriot Front, a violent hate group, were arrested in Idaho for plotting to riot at a local LGBT pride celebration. In pursuing “parental rights”, far-right activists aim to gain control over what their children are taught in schools. Aaron Weiss, deputy director of the Centre for Western Priorities, a conservation group, worries that fights over water in the West could escalate to armed stand-offs. Common to many far-right extremists is disdain for environmentalism.

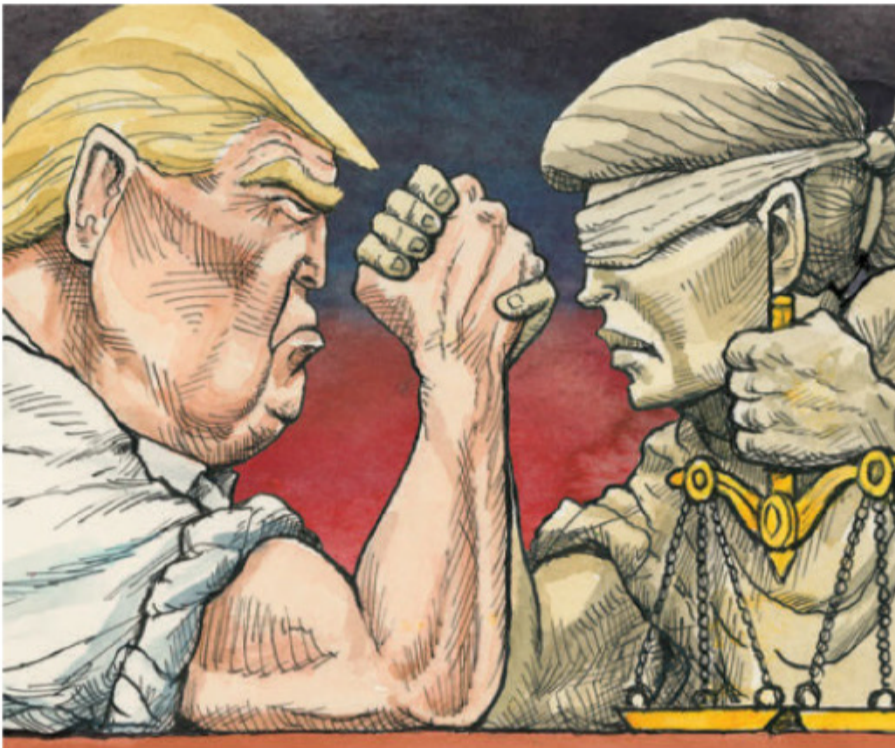
If involvement in local politics does not bring about their desired changes, militia members have suggested they will pull away from politics. Rather than a civil war or a revolution, Mr Bundy envisages a “separation” from civil society of his acolytes and others like them. It is already happening, to some degree. Disaster “prepping” has long been fashionable among right-wingers, and that impulse has only intensified since January 6th. People’s Rights members in Denver discussed planting community gardens and subsistence farming to become more independent. Some seek “safe havens” in case of electricity blackouts. But it is not hard to imagine less extreme forms of dissociation happening more widely as the politics of red and blue states increasingly diverge.

Mr Bundy has a slim chance of becoming Idaho’s next governor. Brad Little, the incumbent, easily beat his Trump-endorsed rival in the Republican primary in May. To skip the primary, which he almost certainly would have lost, Mr Bundy decided to run as an independent, despite his professed affinity for the Republican Party. His support among the fringe offers a warning of how quickly things are shifting. “Probably three years ago I wouldn’t have been a viable candidate,” Mr Bundy tells his audience in Sandpoint. “But I am now.” ■



## Lexington | Utmost gravity

*How the raid on Mar-a-Lago could shake America's foundations*



“ANOTHER DAY in paradise,” Donald Trump cheerfully observed after FBI agents raided his home in Florida as part of a criminal investigation. There is no reason to assume he was being sarcastic. The raid had conjured a Trumpian Eden: the nation’s eyes were riveted upon him once again; Republican legislators who had been edging away rallied behind him, as did potential rivals for the Republican presidential nomination; some of his supporters were again calling online for a civil war to defend their champion. Mr Trump was able to present himself in his favourite light, as the victim of dark, partisan forces out to protect the establishment by dragging him down. Having trashed the FBI and Department of Justice for years, he had prepared not just his core believers but probably half the country to suspect that the rule of law was being undermined, not honoured.

For these reasons and more, the raid is a nightmare for America. Merrick Garland, the attorney-general, would have anticipated that. He is a painstaking former prosecutor and judge—too painstaking for many Democrats who, just as Republicans claim, are quivering to see Mr Trump prosecuted. If Mr Garland made the decision himself to proceed, as seems likely, he must have concluded that legal considerations left him with no choice.

But if so the Justice Department’s determination to keep things on the level is playing into the hands of a man for whom nothing is on the level. Mr Trump’s power to warp reality is so great that enforcing the law against him may actually help wreck the republic. Having withstood his attempts to steal the election, America’s judicial system could be in for a ferocious assault.

There are precious few facts about this investigation to rely upon; much of what is known comes from Mr Trump. This column is going to be speculative, maybe annoyingly so. For once, though, speculating how bad things might become is responsible, rather than frivolous. Mr Trump has again and again broken through the boundaries of the American political imagination.

Mr Trump was already expected to run for a second term as president. He seems certain to do so now. Imagine that the raid yields evidence of criminality, leading to his indictment. Nothing in the former president’s history would suggest that, out of some sense of propriety, let alone shame, he would then suspend his

campaign. Instead, he would have even greater reason to foment distrust and even hatred of the American legal system, as well as the administration of President Joe Biden.

Even a speedy trial and conviction would be less likely to bar a Trump candidacy than to start more rounds of litigation. The constitution, which spells out the qualifications for serving as president, is silent on the question of a criminal record. This is a hypothetical scenario, but not a far-fetched one: America faces the possibility of an indicted or convicted candidate winning a presidential election while campaigning against the rule of law. Or, maybe worse, losing that election. You do not need to rely on speculation to picture what that would look like.

Yet maybe the raid will yield such damning evidence that even the Republican legislators who are threatening to investigate Mr Garland will instead repudiate Mr Trump at last. Or maybe one of the many other lines of inquiry into Mr Trump’s doings, or their cumulative weight, will have that effect. Mr Trump is under investigation in Georgia and New York. The raid appears to stem from an investigation into how he handled classified information; the Justice Department is conducting a separate investigation into his flailing to cling to office.

Do not hold your breath. Lawmakers who crawled back to Mr Trump after the January 6th insurrection are not likely to abandon him over a crime like making off with classified documents, particularly given a president’s vast power to declassify information. And Mr Trump, who studied under the ruthless red-baiting attorney Roy Cohn, has shown how slippery he can be. Michael Cohen, another former lawyer to Mr Trump, testified to Congress that he acted “like a mobster”, not giving direct orders that might implicate him but speaking “in a code”. The president who had the foresight to bar the White House photographer from his presence on January 6th, and leave no trail of telephone calls that day, seems unlikely to have left incriminating evidence lying around Mar-a-Lago. For a man so zealous in pursuit of his self-interest, that would be an astonishing lapse.

### Mr Trump dines out

One warm evening in 1999, Donald Trump stepped out of a famous restaurant, Sylvia’s, on Malcolm X Boulevard in Harlem. Word had spread that the famous developer was eating there, and a large, excited crowd had gathered to greet him. He had been feted all evening by TV stars, financiers and former ballplayers. The stakes seemed lower then, before the attacks of September 11th 2001, and his boasting and lies came off as funny, even roguishly charming.

As Lexington, in those days a writer at a different publication, followed Mr Trump into the crowd and towards his limousine, he called out the question that had been on his mind all night: what was it about Mr Trump that drew people to him like this? “I don’t think about it...” he called back over his shoulder, with a grin. “Whatever it is, it is.”

All these years later, the answer is obvious. The force is Mr Trump’s own desperate need, his vaulting narcissism. That is now the mightiest force in America’s public life, the black hole at the centre of its politics. It has warped the principles of the Republican Party, yanked the Democratic Party off balance and ripped reputations away from once-respected men and women. It is tearing at America’s governing institutions. The raid on Mar-a-Lago may have been necessary to serve justice. A prosecution may eventually prove necessary as well. The hope is that the rule of law has weight enough to survive the contest. ■





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Inequality

# The jet set and the rest

BUENOS AIRES

## Inequality in Latin America is fuelling populist politics

ON AUGUST 7TH Gustavo Petro was sworn in as Colombia's president. He is the first left-wing politician to hold that office. Together with his vice-president, Francia Márquez, a human-rights activist and environmental lawyer (and the first Afro-Colombian to have the job), Mr Petro campaigned on promises to redistribute wealth from Colombia's richest to its poorest, to expand public education and to scrap all new oil exploration in the country. "We will cease to be one of the most unequal societies in the world," his programme declared. The radical message worked: in June's election he was backed by 11m people, or 50.4% of voters.

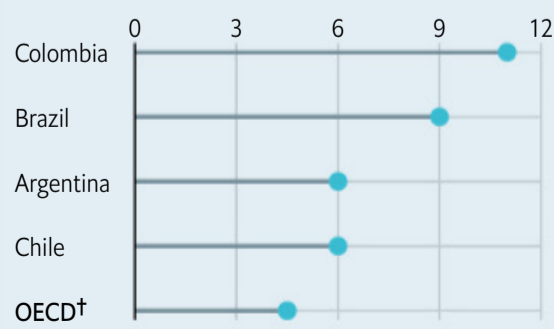
It is not surprising that many Colombians are fed up. The country's Gini coefficient, which measures how income is distributed in a country—zero implies that it is shared equally and 100 implies that one person scoops up all the nation's income—is, at 54, higher than almost anywhere else in the world. At current levels of social mobility, it would take a whopping 11 generations for the descendants of parents in a

typical poor Colombian family to reach the country's average income, according to the OECD, a club of mostly rich countries. That is more than double the average in the OECD (see chart 1). "Equality is possible if we are able to generate wealth for all," declared Mr Petro at his inauguration.

Colombia's inequality, though unusual

### Catching up is hard to do

Number of generations needed for the descendants of someone with a low-income background\* to reach the average income level 2018



Source: OECD  
\*Bottom 10% of the income distribution  
†Based on 24 member countries

by global standards, is only slightly more severe than in other parts of Latin America. The region is the world's most unequal, along with sub-Saharan Africa. Figures from the World Inequality Database, overseen by Thomas Piketty, an economist, provide estimates of top incomes based on tax data. They show that the richest 1% of Latin Americans capture 25% of their countries' national incomes, compared with 18% in the United States (see chart 2 on next page). In much of the region the rich have recently become relatively richer. In Mexico the share of income earned by the richest 1% rose by more than ten percentage points between 2000 and 2019.

Across much of Latin America income inequality fell during the 2000s, thanks largely to high commodity prices and rapid growth that allowed governments to institute relatively generous social programmes. But a subsequent decade of low growth, coupled with the pandemic, reversed many of these gains. The Inter-American Development Bank says that Gini coefficients rose by 6-8% in Colombia, Peru and Bolivia between 2019 and 2020. Losses of jobs and incomes have been bigger among the poorest households. According to the Economic Commission for Latin America and the Caribbean (ECLAC), a UN agency, the number of people who are extremely poor—meaning they are unable to buy enough basic food—rose by 5m from 2020 to 2021, to 86m.

Even before covid-19, the region's yawn▶▶

ing inequality contributed to huge and, at times, violent protests in Chile and Colombia. This summer the biggest demonstrations in more than 30 years took place in Panama, one of Latin America's most stable countries. Inflation was the trigger but inequality was one of the protesters' main grievances.

Its significance is also increasingly evident at the ballot box. Along with Mr Petro several broadly leftist leaders have been elected in the past year. In March Gabriel Boric, a 36-year-old former student leader and protester, was inaugurated as Chile's most left-leaning president in 50 years. Last year Pedro Castillo, a former rural schoolteacher and union leader, became president of Peru. And Luiz Inácio Lula da Silva, a left-wing former president of Brazil, is the favourite to win back his old job at elections in October.

One of the causes of Latin America's inequality is lack of competition. The region is dominated by huge, well-connected, often family-owned business groups in sectors with needlessly high barriers to entry. Many fantastically rich people benefit from highly uncompetitive markets.

For example Carlos Slim, Latin America's richest man and one of the world's wealthiest billionaires, made his money by dominating Mexico's telecommunications industry in the 1990s. A report by the OECD in 2011 found that his company, América Móvil, controlled 80% of the fixed-line market and 70% of the mobile-phone market, and that profit margins were nearly double the average in the OECD. It estimated that between 2005 and 2009 the lack of competition cost Mexico \$129bn, the equivalent of nearly 2% of GDP per year.

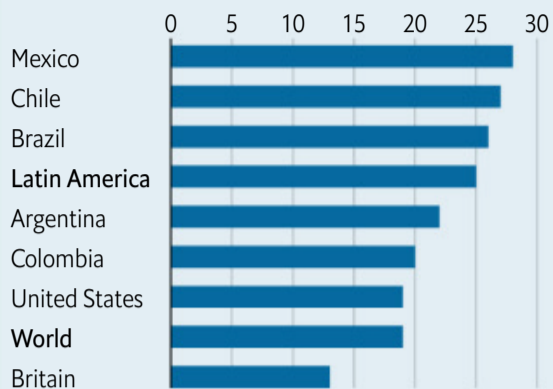
Measures intended to help poorer workers in fact lock them out of formal work. Expensive levies to fund health and unemployment insurance, along with mandatory social-security benefits, can amount to as much as 47% of the average cost of hiring someone in Argentina and Brazil. In Colombia almost 20% of firms say that labour regulations are a major obstacle to creating new jobs, significantly higher than in most developing countries. The minimum wage there is higher relative to the median income than in most OECD economies. The result is that just 40% of Colombian workers have formal jobs, one of the lowest shares in the region. Across Latin America, only around half of workers have a formal job; in some countries, such as Bolivia and Peru, scarcely one-third do.

Taxes do little to reduce inequality. Tax revenues make up only 22% of GDP in Latin America, compared with 34% in the OECD. In richer countries with better tax collection, inequality decreases after taxes and transfers redistribute income to the poorest. But in Chile and Mexico, almost no change occurs (see chart 3). Taxes also fo-

## Re: distribution

### Pre-tax income earned by top 1%, 2021

% of national income



### Income inequality, 2019 or latest available

100=maximum inequality



Sources: World Inequality Database; OECD

cus on goods and services instead of income, hitting the poor hardest. Across the region money raised through personal income taxes comes to only 2% of GDP, compared with 10% in the United States, for instance. El Salvador does not have taxes on property or inheritance; Guatemala's top rate of income tax is a paltry 7%, despite

several attempts to raise it. Many people and companies do not pay what they owe: according to the latest estimates by ECLAC, Latin America lost revenues worth around 6% of GDP in 2018 to tax evasion and avoidance, the equivalent of \$325bn.

Governments have taken some steps to address these problems. In 2013 Mexico overhauled its telecoms sector to spur competition. By 2017 prices in mobile broadband had fallen by 61%. Chile beefed up its antitrust regulator in 2016. Since the mid-2000s, several countries have set up independent commissions to tackle corruption, which accentuates perceptions of unfairness. In Guatemala the findings of one such body led a president to resign in 2015 (see Bello). Yet reform is not easy. A score of judges and prosecutors investigating corruption in Guatemala have been forced into exile since 2018.

The feeling that democracies are rigged in favour of the rich and powerful undermines both democracy and economic reform. According to a survey conducted last year by Vanderbilt University in Tennessee, over 90% of Paraguayans and Colombians believe that the rich sometimes or always buy elections. An average of three-quarters of respondents to Latinobarómetro, another regional survey, believe that governments cater to "powerful groups".

These inequities, both real and perceived, have paved the way for politicians such as Mr Petro and Mr Boric. As candidates, both made big promises, such as, in Chile, forgiving student debt and making public transport free or, in Colombia, giving every unemployed person (11% of the workforce) a state job if they could not find ▶▶



## A Cuban conflagration

Lightning hit a storage tank at Cuba's main oil terminal in Matanzas, starting a fire that spread to three other tanks. One firefighter died and 14 are missing. The lightning rod had not been maintained, say reports in independent media. The fire contributed to a water shortage that forced the shutdown of a nearby power plant. Cuba was already suffering from fuel shortages and blackouts, which had triggered protests.

one in the private sector. These implausible promises were part of their appeal. “Economic benefits have gone to the same people for so long. We are exhausted,” says Angela Martínez-Lighton, a 33-year-old activist who voted for Mr Petro.

It remains to be seen whether Mr Petro and Mr Boric become more pragmatic when faced with the realities of office. Both have already tried to calm market jitters by appointing sensible finance ministers (Mr Petro’s has already ruled out making the state the employer of last resort). And both want to pass tax reforms that aim to place a

greater burden on rich individuals while also protecting growth.

Mr Petro has proposed a reform that seeks to increase revenue by nearly 2% of GDP next year in part by raising rates paid by the top 2% of income earners, imposing a wealth tax (starting at 0.5% on assets of around \$700,000) and taxing exports of oil and other commodities. Mr Boric hopes to increase the share of tax revenue by four percentage points to 31.7% of GDP by 2026, slightly below the OECD average. He would increase personal income taxes for the top 3% of earners and introduce Chile’s first

wealth tax, of 1% for people with more than \$5m in assets.

Things could go awry. Chile’s new tax-reform proposal levies hefty fees on the mining industry, which could discourage investment in copper mining, a mainstay of the economy. The war in Ukraine, and rising interest rates in the United States, have put Latin America’s economies in a tight spot, making it harder for governments to keep their promises. Mr Boric’s approval rating has sunk from 50% when he took office in March to 37%. Mr Petro will hope his honeymoon lasts longer. ■

## Bello Darkness returns to Guatemala

*The drift to authoritarianism accelerates in Central America*

FOR MORE than 30 years José Rubén Zamora’s newspaper has crusaded against corruption in Guatemala, making many enemies along the way. On July 29th police raided Mr Zamora’s home and arrested him. This week he appeared in court on charges including money laundering and blackmail. According to Rafael Curruchiche, the anti-corruption prosecutor, the publisher was not arrested for his journalism but for his “business activity”, for allegedly trying to swap some \$40,000 in cash for a cheque from a former banker accused of corruption who is now collaborating with the authorities. Mr Zamora says he is a victim of “political persecution”. Many Guatemalans believe him. His arrest is another milestone in the country’s seeming return to authoritarian rule.

For much of Mr Zamora’s career Guatemala, with 17m people, saw halting democratic progress. A long civil war between leftist guerrillas and military dictatorships, which caused some 200,000 deaths, ended with a peace agreement in 1996. The economy has grown steadily. But roughly half of Guatemalans, many of them indigenous, live on less than \$5.50 a day (adjusted for local purchasing power), and the country has the world’s fourth-highest incidence of child malnutrition. Its biggest export is people: the 1.5m or more Guatemalans who live in the United States sent back remittances equal to 15% of GDP in 2020.

Reformers blame many of the country’s ills on the corruption of an entrenched power structure, “a political-criminal network of big business, organised crime and politicians who become businesspeople”, as Bernardo Arévalo, an opposition legislator, puts it. That network was placed on the defensive after a reforming president invited the United

Nations in 2006 to set up an anti-corruption commission known as CICIG. Working with invigorated local prosecutors and judges, CICIG secured the conviction of a former president. Another president, Otto Pérez Molina, a retired general, resigned in 2015, after big street demonstrations persuaded Congress to lift his immunity from prosecution. He has spent the years since then in preventive detention on charges of customs fraud.

But CICIG overreached. Headed most recently by Iván Velásquez, a Colombian prosecutor who this week became his country’s defence minister, it sought criminal charges against Mr Pérez’s successor, Jimmy Morales, for a campaign-finance transgression of which he said he was unaware. Mr Morales refused to renew CICIG’s mandate. It departed in 2018.

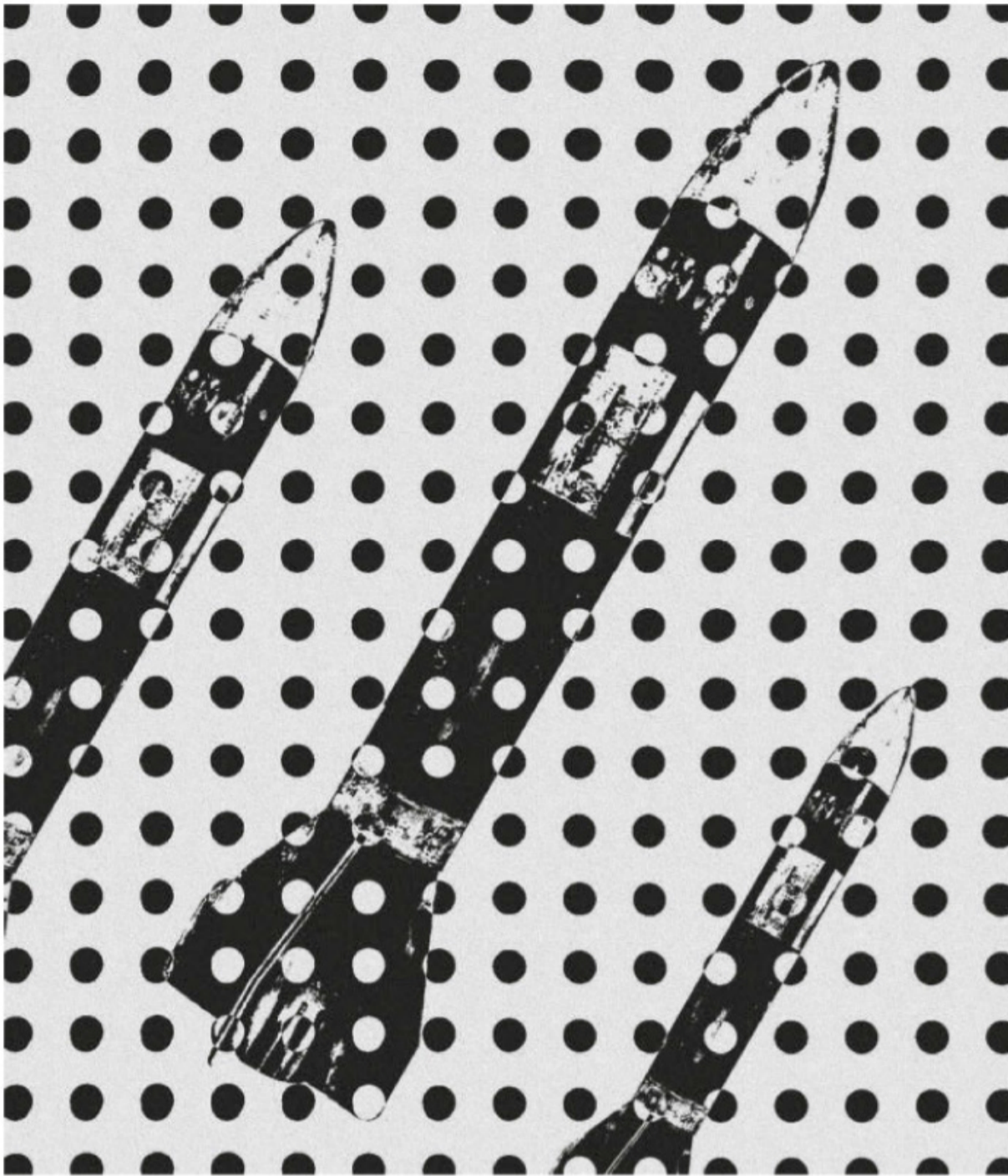
The government of Alejandro Giammattei, a conservative who won in 2019, has gone on to assault the Guatemalan judiciary. The government’s allies in Congress have hobbled the Constitutional Court and installed a pliant attorney-general, Consuelo Porrás. Two dozen

prosecutors and judges as well as several journalists have been forced into exile; others have been arrested. “The political class has united behind impunity” for corruption, says Daniel Haering, a political scientist in Guatemala City.

Many in Washington worry about the weakness of democracy and the rule of law across Central America, a big source of migrants. Under Daniel Ortega, Nicaragua has become a dictatorship. El Salvador’s wildly popular strongman president, Nayib Bukele, has taken control of Congress and the judiciary and has locked up some 45,000 suspected gang members. Honduras’s former president, Juan Orlando Hernández, is in jail in New York, facing charges of drug-trafficking; the country’s outlook under a new left-wing government is uncertain. Joe Biden’s administration has named and sanctioned 36 Guatemalans, mainly officials and business people, as “corrupt and undemocratic actors” in Central America. They include Ms Porrás and Mr Curruchiche, who both deny wrongdoing. Yet American pressure has so far proved ineffective.

The worry now is that next year’s general election will be rigged. In 2019 the Constitutional Court blocked the candidacy of Thelma Aldana, a popular former attorney-general who collaborated with CICIG and who might have won. With an approval rating of just 19% in a recent poll by CID Gallup, Mr Giammattei, who is constitutionally barred from running again, is one of Latin America’s least popular presidents. But his supporters dream of installing an ally by blocking more candidates this time, reckons Mr Haering. They may manage it. The opposition is divided and the streets are quiescent. Guatemala’s political class includes many more like Mr Giammattei.





### Nuclear weapons in South Asia

## The three-body problem

**The arsenals of China, India and Pakistan are growing. But the countries are not yet in an arms race**

FOR MOST of the 75 years since India and Pakistan became independent states, at midnight on 15th August 1947, nuclear weapons have cast a shadow over South Asia. China got the bomb in 1964, two years after thumping India in a border war and forcing its policymakers to confront their country's vulnerabilities. India showed it too could build one with a demonstrative explosion just a decade later. Pakistan was a screwdriver's turn away by the 1980s. In 1998, both India and Pakistan conducted nuclear-weapons tests, making official what was already an open secret.

Yet, in many ways, all three countries were hesitant nuclear powers. China did not deploy a missile capable of hitting the

American mainland until the 1980s. When India and Pakistan fought a war over Kargil, in the disputed region of Kashmir, in the summer of 1999, India's air force, tasked with delivering the bombs if needed, was not told what they looked like, how

many there were or the targets over which they might have to be dropped.

All that has changed. China has been adding hundreds of new missile silos in recent years. When Pakistan celebrated its 60th birthday in 2007 it had roughly 60 nuclear warheads. Fifteen years on, that number has nearly tripled (see chart on next page). The combined arsenals of China (350 warheads), India (160) and Pakistan (165), though modest by American and Russian standards (several thousand each), now exceed British and French stockpiles in Europe (around 500 in total). All three countries are emulating the American and Russian practice of having a nuclear "triad": nukes deliverable from land, air and sea. South Asia's nuclear era is entering a more mature phase.

That need not mean a more dangerous one. A new report by Ashley Tellis of the Carnegie Endowment, a think-tank in Washington, explores the dynamics among Asia's three nuclear powers. Since 1998, most Western attention has focused on the risk of a conflagration between India and Pakistan over Kashmir. That danger persists. Yet the risk of an arms race has been exaggerated, argues Mr Tellis, a former State Department official.

India's arsenal has grown slowly, he observes—it remains smaller than Pakistan's—and its nuclear posture remains "remarkably conservative". The comparison with the nuclear behemoths is instructive. America and Russia both maintain huge arsenals designed to enable so-called counterforce strikes—those which preemptively target the other side's nuclear weapons to limit the damage they might do. That means their arsenals must be large, sophisticated and kept on high alert.

In contrast, China, India and Pakistan, despite their manifold differences, all view nukes as "political instruments" rather than "usable tools of war", argues Mr Tellis. Both China and India, for instance, pledge that they would not use nuclear weapons unless an adversary had used weapons of mass destruction first, a commitment known as "no first use". America disbelieves China's promise, much as Pakistan doubts India's. But the Chinese and Indian arsenals are consistent with the pledges, insists Mr Tellis.

He calculates that if India wanted to use a tactical (or low-yield) nuclear weapon to take out a Pakistani missile on the ground, it would have to do so within a few minutes of the Pakistani launcher leaving its storage site. That is implausible. India does not have missiles that can launch within minutes of an order, nor those accurate to within tens of metres of their target. And, for now, China's rocketeers also train and operate on the assumption that their forces would be used in retaliation. The result is ▶▶

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▶ that things are more stable than the swelling arsenals suggest.

There are two wrinkles, though, and both concern China. The Pentagon says that China's arsenal could expand to 1,000 warheads by 2030, as it seeks to overwhelm American missile defences and narrow the numerical gap with its chief rival. If that comes to pass, India might fear that its comparatively meagre arsenal no longer serves as a credible deterrent. If India has fewer warheads, it will want to be sure they can inflict unacceptable damage on Chinese cities. But the thermonuclear device which India tested in 1998 was widely considered to have fizzled.

The real problem, though, is not so much the number of weapons as what China might be able to do with them. India gets by with a small arsenal because it is highly secretive about the location of its nukes—the same approach that China has taken for most of its history. Yet improvements in surveillance technology (such as new spy satellites), artificial intelligence that can find patterns in huge amounts of data and cyber-espionage against nuclear command-and-control networks could one day pierce “the veil of opacity”, warns Mr Tellis. That, in combination with more warheads and more accurate missiles, might enable China to “hold at risk almost every Indian nuclear-storage site”, a prerequisite of counterforce.

It is, in part, to hedge against such a destabilising rupture that India has decided to hide its nukes in the ocean. Its first nuclear-armed submarine, the *Arihant*, began patrols in 2018. Another, the *Arighat*, is undergoing sea trials. Two more are under construction. But Mr Tellis doubts that India, despite extensive Russian help, has been able to build a sufficiently compact and powerful naval nuclear reactor for extended spells at sea, and a vessel quiet enough to remain undetected.

The conventional wisdom is that a cascade is under way: America and Russia are abandoning arms control; China races to catch up with America; India pursues Chi-

na; Pakistan follows. The reality is more complex, insists Mr Tellis. China has an eye on India, too. India increasingly pays more attention to China than to Pakistan. And Pakistan—specifically, its powerful army—is set on its own path, its programme “increasingly driven less by what India is actually doing and more by its fervid imaginings of Indian capabilities”.

In one sense, nuclear weapons are stabilising. They preclude, among their possessors, the big wars that have roiled South Asia through its history. But they do not prevent small or peripheral ones. And the terror they evoke can be exploited. Pakistani generals have used their nuclear shield to harbour jihadists. China might one day seek to emulate Russia's use of nuclear threats in Ukraine to keep America from intervening in a war over Taiwan.

South Asia's nuclear future will depend on whether nuclear conservatism withstands the pressures of power politics and the temptations of technology. The direction of China's arsenal does not offer grounds for optimism. ■

## South Korea

# The crownless again shall be king

SEOUL

**Yoon Suk-yeol tries to claw back the powers of the prosecutor's office**

THE DISGRUNTLED in South Korea have long shaved their heads. The tonsure, a symbol of sacrifice, works as a form of passive resistance. Hence the number of dissident officials and put-upon shopkeepers who ask their friends to wield a defiant razor before the cameras. Hence, too, the scene last month outside the headquarters of the National Police Agency (NPA) in Seoul, the capital, as the locks of four officers fell on capes bearing the words “Withdraw the MOIS police bureau. Guarantee police neutrality.”

That “police bureau”, which started work on August 2nd, gives the Ministry of the Interior and Security (MOIS) oversight of certain decisions within the police force, including appointments. Many cops are furious about the infringement on their autonomy. Opposition politicians and civic groups complain that the bureau was set up without proper parliamentary oversight. They worry it means the police will be forced to kowtow to the administration. That fear is not unreasonable: the NPA was made independent in 1991 because of its history as an attack dog of the former military dictatorship.

The bureau's establishment is a reaction to a pair of reform bills passed just be-

fore Moon Jae-in, the previous president, left office in May. Building on similar bills from 2020, they transferred to the police much of the authority over criminal investigations previously held by the prosecution service, which is ultimately answerable to the president. Mr Moon had entered office promising to weaken the service, which enjoyed a degree of autonomy unparalleled in other democracies. Unlike the police force, it did not undergo serious reform after democratisation in the late 1980s. The idea is to increase accountability and impede the use of the prosecutor's office in political vendettas.

Yoon Suk-yeol, Mr Moon's successor and a career prosecutor (pictured), was livid. His administration is asking the Constitutional Court to void the laws. The bureau is plan B. It is explicitly designed to control the newly empowered NPA.

Yet even with Mr Moon's reforms the prosecution service retained significant power. It can unilaterally investigate corruption and economic crimes. It also maintains a degree of influence over the police, since the NPA still cannot get warrants without its approval. As a bonus, that shields prosecutors from police investigation, since their colleagues are unlikely to approve the warrants required.

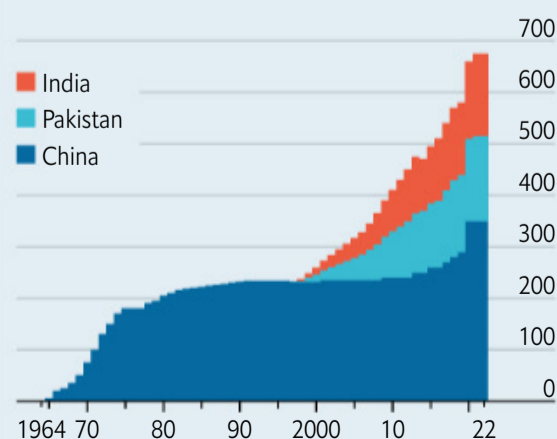
The prosecutor's office has always been “a valuable political weapon”, says Ethan Shin, a lawyer. Even Mr Moon, for all his reformist zeal, was not above using it. Early in his term he appointed Mr Yoon as his prosecutor-general and set him on both big business and the previous president, Park Geun-hye, who was jailed for corruption. Mr Shin likens the service to the powerful yet corrupting ring in “Lord of the Rings”: “Everyone knows the ring has to be destroyed, but you have it, it's your ‘precious.’” Little wonder that Mr Yoon wants his powers back. ■



Prosecco for the prosecutors

## Quantity v quality

Estimated nuclear warhead inventories



Source: Federation of American Scientists

## Australia's indigenous people

## Voice recognition

ULURU, NORTHERN TERRITORY

The prime minister wants to include  
Aboriginals in the constitution

**T**HIS ROCK is an awesome feature," says James, a ranger of the Anangu people in central Australia. "It's a story book." The story may be about to get longer. James is standing at the base of Uluru, a humungous monolith embedded in the red desert near the middle of Australia. The country's indigenous people have made it a civil-rights symbol: they want Australians to change the constitution to guarantee them a say in laws that affect their lives. The battle over the call for an Aboriginal "voice to Parliament" is looming as a big test for Anthony Albanese, the newish prime minister (pictured), and his centre-left Labor government.

In late July Mr Albanese flew to an Aboriginal festival in Arnhem Land, some 2,000km north of Uluru, to add his own voice to the campaign. On July 30th he promised the region's Yolngu people a referendum on the idea within his government's three-year term, calling it "a momentous change" and a step "in our nation's journey of healing".

Aboriginal people make up barely 3% of Australia's 25m inhabitants. But their forebears had lived on the continent for some 60,000 years before the British landed in 1788. They played no part in drafting Australia's constitution and were not accorded any rights in it.

Five years ago Aboriginal delegates gathered at Uluru, a sacred site also known by the name colonists gave it, Ayers Rock, after a long quest to find a formula to give "First Nations" a say in government policies over their people. The delegates produced the "Uluru Statement from the Heart", a short, elegant cry for constitutional change. Their peoples' "ancient sovereignty", it said, had never been ceded, and still co-existed with that of the British Crown. The statement added that the shocking levels of imprisonment and broken families among Aboriginal people were proof of the need for change.

The conservative government of the day greeted the plea coldly. It misrepresented the statement as a call for a third chamber of parliament, and said new laws would be better than a constitutional amendment. But Aboriginal leaders recall how John Howard, a former conservative prime minister, abolished a commission charged with protecting Aboriginal interests. Only the constitution can truly protect them, they argue.



Person of colour

Mr Albanese has embraced this idea. For the referendum campaign, his government will draw on a report by Marcia Langton and Tom Calma, two Aboriginal leaders, explaining how the voice would work. They propose a body of 24, chosen by Aboriginal people, to advise the federal government whenever legislation affecting indigenous Australians' "social, spiritual and economic well-being" is in the works. This approach, Mr Albanese argues, would mean policies "are always more effective". He, too, points to shocking statistics, such as that Aboriginals die on average 20 years earlier than other Australians.

Some critics, including a handful of Aboriginal figures, deride the idea as mere symbolism. Mr Albanese is keen on symbolic gestures: his government's press conferences now feature the flags used by Australia's indigenous peoples next to the Australian one. Yet changing the constitution will not be as easy as unfurling extra flags. The document's 19th-century framers set a high bar for amendments: a "yes" vote both nationally and in at least four of the country's six states. Just eight of 44 proposed changes have passed in 121 years.

There are some hints, however, of bipartisan political support. The conservative opposition seems to have warmed slightly to the Uluru Statement since leaving government. Julian Leeser, its Aboriginal affairs spokesman, has publicly supported a constitutional voice. Peter Dutton, the opposition leader, is more vague.

The election result that swept Labor to power in May suggests Australians are tired of the culture wars that prevailed under nine previous years of conservative government. Penny Wong, the foreign minister, even talks of a "First Nations approach to foreign policy". Mr Albanese is optimistic that a referendum will pass. As he puts it, "If not now, when?" ■

## Papua New Guinea

Worst. Election.  
Ever.More violence, more corruption, more  
fraud. But fewer deaths—so far

**I**N PARLIAMENT ON August 9th, 97 members voted for the incumbent, James Marape, to remain prime minister of Papua New Guinea. None voted against him. His rival and predecessor, Peter O'Neill, walked out of the chamber in disgust.

The parliamentary vote concludes a lengthy and deeply flawed election, even by the standards of a country known for dismal polls. Mr Marape's Pangu party secured only 36 of 118 seats. But he also has the backing of 17 parties in his coalition and several independents, giving him near-total control of parliament, at least until some lawmakers are inevitably lured away by rivals. Not that their seats were all honourably won. Paul Barker, the director of the Institute of National Affairs, a think-tank in Port Moresby, the capital, believes that each poll is getting worse in terms of the scale and extent of fraud. This one, he says, was the "worst election ever".

Papua New Guinea's 9m people inhabit the most linguistically diverse nation on Earth, with some 850 mutually incomprehensible languages. Despite abundant natural resources, including gas, gold, timber, tin and coffee, GDP per person remains below \$3,000, about the same as Honduras. Over the past decade the country has become a big exporter of natural gas, but few locals have benefited. Mr Marape has promised to "take back" a greater share of the wealth from the mostly foreign resource-extraction companies. But corruption is a big part of the problem. Even honest prime ministers end up doing deals with unscrupulous politicians. Voters see little prospect of any long-term improvement, so they resort to the short-term gains that come from selling their votes.

Electoral fraud is most rampant in the highlands, the central spine of the country, where around 40% of the population lives. One tactic is the hijacking of ballot boxes, either to destroy them or to stuff them. Joe Ketan, an expert on politics and society in Papua New Guinea, who lives in the mountainous interior, observed the election in two provinces near his home. He found that "all the ballots were marked by candidates and their agents". Much of this fraud is orchestrated at the local level, with rival candidates agreeing to distribute all the available ballot papers among themselves. In one province, women queued for hours in the heat to vote only to be turned away by youths armed with bush knives. ▶▶

► Authorities halted the count in many constituencies, leaving it to the courts to decide whether to declare these elections “failed”. Fear of official bias in declaring ballot boxes suspicious can itself be a trigger for violence. Schools in the capital had to close for a week after machete-wielding men rampaged outside a counting centre because the returning officer set aside several ballot boxes from their candidate’s area. Mr Barker warns of a corrosive “highlandisation” of the process in the northern part of the mainland. In the south and on the islands off its east coast, elections usu-

ally run much more smoothly.

Deaths, at least, have so far been fewer than in the previous election. Some 55 people were killed during polling this year, compared with 200-odd in 2017. Many of the murders then occurred after results were declared and during the recriminations that followed. This time around, there has been a much heavier security presence. In some cases, though, police and soldiers have themselves been responsible for fatalities. On August 9th police officers shot and killed five people protesting about the result in a highland province.

Mr Marape promises to rectify many of these problems. He needs to do so quickly. Incoming prime ministers have an 18-month grace period during which they cannot legally be removed from office. Most then face a no-confidence vote, which was how Mr Marape himself initially became prime minister—at the expense of Mr O’Neill—in 2019. If Mr Marape can sustain himself in government without doing too many dodgy deals, he may even manage to do some good for his beleaguered citizens. More likely is that the elections of 2027 will be even worse. ■

## Banyan Lost in transition



*Post-war justice is a nice idea. Too bad about the politics*

IT HAS BEEN 20 years since Sushila Chaudhary’s sister was abducted from her village by Nepal’s army, never to return. It has been 18 years since soldiers came to her brother’s house, locked him in a room, and tortured and killed him. Ms Chaudhary, now a lawyer in her mid-30s, has spent the better part of two decades trying to find out who killed her brother and what happened to her sister. Like many others who lost family members during Nepal’s civil war from 1996 to 2006, or who themselves suffered abuse, she has been frustrated by the authorities. “I am sure there are records of who is responsible,” she says. “But they have never given them to us.”

More than 17,000 people were killed, 1,300 were “disappeared”—kidnapped and probably killed—and tens of thousands were displaced during the war, which pitted Maoist insurgents against the government of what was then still a constitutional monarchy. The war ended with a negotiated peace supervised by the UN after the king, who had sought to crush the insurgency by assuming total control late in the conflict, was forced to return some powers to Parliament. Soon after, Nepal became a republic.

One stipulation of the peace deal was a commitment by both parties to a proper process of what lawyers and human-rights types call “transitional justice”, or healing war wounds by revealing the whereabouts of the disappeared, making a record of atrocities and trying perpetrators in court. That commitment remained on paper. Democratisation ended the 240-year-old monarchy, but it also turned former adversaries into politicians. They had little desire to draw attention to past sins. Neither side ever released any information about the whereabouts of the disappeared.

In 2014, after years of dilly-dallying, the government set up two commissions—one to investigate disappearances and the other to examine other human-rights violations—as part-fulfilment of conditions laid down in the peace agreement. The commissions received a combined total of more than 60,000 complaints and have had their mandate extended several times, most recently in July. Yet neither one has ever held a single hearing or referred a case to the courts. Most observers reckon that they were set up to fail. “They had enough good people to make them look plausible, but enough saboteurs to ensure nothing would happen,” says Kanak Mani Dixit, a journalist who has kept a close eye on them.

Earlier this year, Ms Chaudhary and other advocates had reason to think that things might change. In April Govinda Sharma Bandi, a prominent lawyer who had long pushed the government to do more to investigate war crimes, was appointed justice minister in a cabinet reshuffle. He said he planned to make the revival of the push for transitional justice

the central goal of his tenure. The governing parties, keen to curry favour with international donors, looked likely to play along. Moreover, some younger army brass had begun to grumble about being barred from well-paying UN peace-keeping jobs because of lingering questions over past atrocities, raising hopes that the armed forces’ resistance might be softening, too.

Last month Mr Bandi presented to Parliament a bill amending the flawed law that set up the commissions in 2014. It would make it harder for those who committed serious crimes to receive amnesty. It would also give victims the right to reparations and relatives of the disappeared the right to their property. Critics say the new version is still riddled with loopholes that would allow culprits to escape justice, and that it provides insufficient resources for investigations. Still, Mr Bandi hopes it will clear the way for a new commission to start working on the mountain of complaints at last. “It is not perfect,” he admits, “but some level of compromise is necessary in transitional justice.”

If the law passes, the government must implement it. However, the political environment has not changed enough for that to happen. Former combatants from both sides remain in power. Their appetite for investigating themselves has not grown. The law may end up as a fig leaf.

That possibility—even likelihood—provides a useful, if disheartening, lesson for those pursuing post-war justice elsewhere: when prosecuting wartime abuses, formal legal provisions matter less than politics. As long as those who committed the crimes remain in power, it is fiendishly difficult for victims to obtain justice, or even a hint of the truth.



## Life under the Taliban

## Peace, of a sort

## Afghanistan is poorer and hungrier than a year ago. But it is safer

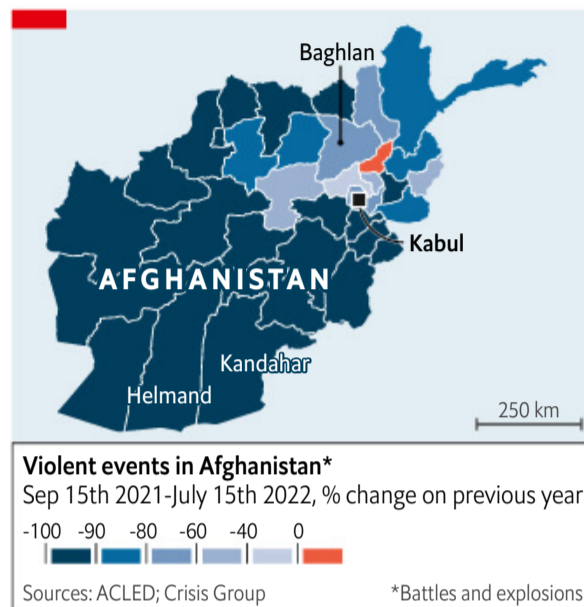
ONE YEAR ago Lema had a good life. Armed with a bachelor's degree in law and political science, the 27-year-old had a steady job in Kabul, Afghanistan's capital. She worked out at a local gym in her spare time. But since the Taliban took control of the country last year, women have been barred from many jobs, from travelling without a male escort and from dressing as they please. Lema has lost her job. Her household of 13—parents, siblings, their families—is struggling to get by. Her fiancé has also lost his job. Her brother's business has gone bust. She cannot walk the streets alone. The gym is out of the question.

For Mahmood, a watermelon farmer in Baghlan province, north of the capital, things are looking up. Shortly before the Taliban took over, his house was targeted by government forces, who thought it was being used as a militant hideout. They approached the property and opened fire. Mahmood rushed his family to safety at the back of the building. It was not unusual for farmers to get caught up in the fighting. But since the Taliban returned to power, the guns have mostly fallen silent. True, poor rains have ruined Mahmood's harvest, his relatives have lost their jobs and his family is broke. But at least he no longer has to worry about his children being shot. Moreover, charities are once again coming to his village and handing out cash.

The Taliban's capture of Kabul on August 15th last year capped a lightning advance through the country. The ease of their victory surprised everyone, including the fighters themselves. The world watched in horror as America botched its withdrawal and desperate Afghans thronged the airport hoping to flee. The Taliban swiftly established total control, and the country fell into crisis.

The main problems are financial. The economy collapsed as the West cut off Afghanistan from the global banking system and froze its foreign reserves. Between September and December last year, GDP fell by a third compared with the same period a year earlier. Most of the country is destitute and hungry. Prices for food and fuel were 50% higher in June than a year before. Only one in 20 families have enough to eat.

The Taliban are not helping matters. Despite claims that they have changed and promises of "a better future" for Afghans, the new Taliban behave a lot like the old lot, who ruled the country from 1996 to



2001. The Ministry of Virtue and Vice has been reconstituted and its morality police are out in force, harassing men who trim their beards and women who are not covered from head to toe. And the Taliban are still offering haven to their terrorist friends. On July 31st an American drone strike killed Ayman al-Zawahiri, al-Qaeda's leader, in central Kabul.

Women are undoubtedly the worst off. In two decades under an American-backed government, many had grown accustomed to a degree of freedom. The female literacy rate more than doubled between 2000 and 2018, albeit to only 30%. A generation of women got jobs as doctors, journalists and lawyers. Now they are being forced out of public life once more. In March the Taliban backtracked on their promise to let girls

back into secondary schools.

Yet some Afghans, like Mahmood, are better off than they were a year ago. Villagers who once lived on the front lines of the conflict, in provinces like Helmand and Kandahar, are safer than they have been in years. According to Crisis Group, a think-tank, violent incidents—armed clashes, drone strikes, suicide bombings—in the ten months to mid-July were down 87% compared with the same period the previous year (see map).

For many rural Afghans, not much else has changed. Fierce conservatism is not new in villages in the south of the country, which produced the Taliban. Women there are used to covering up and staying home. Such far-flung places never saw much of the aid money that poured into the country. As security has improved, humanitarian assistance has started arriving.

Residents in these remote parts are rebuilding their lives, sowing crops and fixing up their homes. In a recent World Bank survey of heads of households, the share of rural respondents who said they were employed rose to 81% in the last three months of 2021 from 73% two years earlier. (In cities, that share dropped slightly.) They are hardly thriving—being employed does not mean earning a decent wage, and many will be sole breadwinners covering expenses for large families. But they are at least able to work.

Peace may not last, of course. Afghans have been changed by 20 years of American-backed rough democracy. Women, unwilling to live with the Taliban's bigotry, are taking to the streets in protest. Economic hardship is stirring discontent. Newly poor Afghans blame the Taliban for mismanagement and foreign powers for cutting them off. "There are winners and losers yet again," says Ashley Jackson, an analyst at the Overseas Development Institute, a think-tank in London, "and that sets the stage for conflict." ■



From poacher to gamekeeper





China, Taiwan and America

## Danger ahead

BEIJING, TAIPEI AND WASHINGTON, DC

**The crisis over Taiwan could mark the beginning of a perilous new era of hostility between China and America**

**I**N JANUARY 1950, three months after the Communist victory in China's civil war, President Harry Truman issued a statement. America, he declared, would not intervene militarily to help China's defeated Nationalists, who had fled to the island of Taiwan. Mao Zedong was already preparing an invasion and probably would have succeeded had the Korean war not erupted in June that year. The conflict prompted Truman to change tack, backing South Korea and ordering the Seventh Fleet to defend Taiwan in a bid to halt the spread of communism in Asia. Four years later, when Chinese forces attacked some of Taiwan's outlying islands, American officials threatened nuclear strikes on China, forcing Mao to back down again.

With hindsight, that was the first in a succession of military showdowns over Taiwan that have defined Sino-American relations and had consequences for the world beyond. Seven decades later the fourth such crisis is unfolding, this time triggered by a visit to Taiwan from the

speaker of America's House of Representatives, Nancy Pelosi, on August 2nd and 3rd. Ms Pelosi was the most senior American politician to visit the island, which China still claims, since one of her predecessors, Newt Gingrich, went in 1997. Although the crisis is far from over, it already looks set to usher in a dangerous new era of hostility between China and America.

Ms Pelosi's visit was a "manic, irresponsible and highly irrational" act, declared China. Its diplomats accused America of violating commitments it made when it first recognised the People's Republic of China (PRC) in 1979. Since Ms Pelosi left Taiwan, China has fired ballistic missiles over the island for the first time, sent military ships and aircraft across the median line of the Taiwan Strait in record numbers, and conducted live-fire drills encircling the island in a rehearsal for a blockade. China has also imposed economic sanctions on Taiwan and cut military and other co-operation with America.

So far China's response appears cali-

brated to advertise its profound displeasure and newfound capabilities, while stopping well short of war. Yet these are probably just the opening salvos. Xi Jinping, China's leader, appears keen to avoid a direct military confrontation with America. At the same time, he cannot appear timid, having styled himself as a strongman and promised progress towards reunification. On Chinese social media, rabble-rousers are already outraged that China did not shoot down Ms Pelosi's plane. The stakes for Mr Xi are especially high in the run-up to a Communist Party congress later this year, when he is expected to secure a third five-year term as party leader, violating recent norms.

China's countermeasures are thus likely to play out on many fronts, over weeks, months or years. They will probably include more economic sanctions targeting Taiwan's governing Democratic Progressive Party. There will surely be efforts to deter other foreign politicians from visiting the island, and to woo the last dozen or so countries that have diplomatic ties to Taiwan. Most importantly, though, China is likely to try to establish a "new normal" of military activities around Taiwan, including regular forays into waters and airspace that the island claims and, possibly, further missile tests over the island. China's Eastern Theatre Command, which conducted the latest drills, said on August 10th that it had completed "various tasks" in the ▶▶

► exercises but would continue to monitor the Taiwan Strait closely and conduct regular combat-readiness patrols there.

Where things go from here will partly depend on what America and its allies do to help Taiwan. America has shown restraint so far but has pledged to resume regular military operations in the area, including transits through the Taiwan Strait. It will probably provide more training and weapons to Taiwan. Some foresee a cycle of action and reaction, with increased risks of accidents and miscalculations. “Historians may very well look back at the summer of 2022 as the moment when US-China relations shifted from competition for relative advantage to overt confrontation, with a much greater risk of crises and escalation,” says Taylor Fravel of the Massachusetts Institute of Technology.

### Pelosi plays with fire

The fourth Taiwan Strait crisis began in April, with reports that Ms Pelosi would visit the island. A critic of China’s human-rights record, she no doubt had her legacy in mind: at 82, she is probably in her last term as speaker. A bout of covid-19 delayed her visit. When asked about the trip in July, President Joe Biden said military officials thought it was “not a good idea right now”. A few days later Mr Xi warned him: “Those who play with fire will perish by it.” But to cancel would be to yield to Chinese bullying. And Mr Biden did not want to challenge the prerogatives of Congress.

In the end, Ms Pelosi’s flight into Taiwan went unchallenged. Welcomed by cheering well-wishers, she met Taiwan’s president, Tsai Ing-wen, as well as Chinese dissidents. Dismissing China’s threats, she echoed American officials in arguing that her trip did not disrupt the status quo, citing Mr Gingrich’s trip and regular visits by congressional delegations.

In fact, the status quo has been unraveling for years. Since taking power in 2012, Mr Xi has stoked a fiery form of nationalism and placed stronger emphasis than any leader since Mao on winning back Taiwan. Without setting a clear timetable, he has said unification cannot be postponed indefinitely. He has linked it to his goal of “national rejuvenation” by 2049, the PRC’s centenary. The armed forces have been equipped and drilled to prepare for an assault: Chinese jets and bombers often buzz near Taiwan’s airspace. Some American generals think Mr Xi, now 69, could attempt an invasion in the 2030s—or even this decade—hoping to achieve unification in his lifetime.

Chinese officials, meanwhile, have become convinced in recent years that America is steadily hollowing out its “one-China” policy. Under that convoluted formula, America recognises the PRC as China’s sole legal government and “acknowledges” its

position that Taiwan is part of a single China. But America does not recognise the PRC’s sovereignty over Taiwan and maintains unofficial links to the island. It is also obliged by domestic law to provide Taiwan with defensive arms and to maintain its own capacity to protect the island. Yet America has long observed “strategic ambiguity”, not specifying whether or how it would intervene in a war over the island.

China’s concerns intensified after 2016 as the Trump administration expanded high-level official visits and arms sales to the island—including offensive weapons. To China’s frustration, Mr Biden has broadly continued that approach. He has also publicly suggested three times that America would directly defend Taiwan. Last year, he said that Taiwan was independent. His aides walked back all those comments. Chinese officials seethed nonetheless.

Taiwan, as a self-governing democracy of 24m mostly Han Chinese people, represents a challenge to the giant autocracy next door; especially since its free citizens are richer than their voteless kin across the strait. The island has also drifted further from the mainland politically in recent years, notably since Mr Xi snuffed out civil liberties in Hong Kong, rendering deeply unattractive the “one country, two systems” formula that has governed the former British territory, and which Mr Xi has offered as a template for a peaceful union of China and Taiwan. Although polls show that most people in Taiwan favour maintaining the status quo over declaring independence immediately (which would surely provoke an invasion), only a small minority favour unification, and nearly all reject “one country, two systems”.

The timing of Ms Pelosi’s visit was especially sensitive. Mr Xi has already faced unexpected difficulties this year, in finessing his support for Russia over Ukraine and sustaining his zero-covid strategy despite

an economic slowdown. This month, if tradition holds, party bigwigs will meet in the resort town of Beidaihe, where in the past they have had informal discussions about policies and personnel. How much of that still goes on under Mr Xi is uncertain. But he and other leaders must soon make some important decisions, on who will surround him at the top and what priorities to pursue in the years ahead—including with respect to Taiwan.

### Xi’s multi-tasking

Once it was clear that Ms Pelosi’s visit was going ahead, Mr Xi appears to have sensed an opportunity to try to achieve several goals at once: projecting strength at home, reversing the trend of closer American engagement with Taiwan, deterring other countries from interfering, and conducting the largest-ever rehearsal for an assault on the island. At the same time, he appears to have telegraphed his desire to avoid a direct military confrontation with America, for example by not trying to intercept her plane and delaying the live-fire drills until after she had left.

When the drills did start, they were calibrated to echo, yet surpass, those that China conducted during the previous big Taiwan crisis, in 1995-96, after the island’s then-president visited America. The six areas marked out for live fire were closer to the island than they were back then, and at some points came within 12 nautical miles (22km) of Taiwan’s shores, overlapping what it claims as territorial waters and airspace (see map). This “encirclement” creates “very good conditions for reshaping the strategic situation in a way that benefits unification,” Major-General Meng Xi-angqing, a professor at the People’s Liberation Army (PLA) National Defence University, told China’s state broadcaster.

In the first days of the crisis in July 1995, China fired just six missiles, one of which malfunctioned. On August 4th that it fired 11, according to Taiwan’s ministry of defence. Japan said that five landed within its exclusive economic zone (which stretches 200 nautical miles from its shore). Of those, four were believed to have flown over Taiwan. In another first, dozens of Chinese military aircraft and ships crossed the Taiwan Strait’s median line on consecutive days in a simulated air and sea attack.

Joseph Wu, Taiwan’s foreign minister, accused China of using Ms Pelosi’s visit as a pretext to rehearse an invasion plan that also included cyber-attacks, disinformation and economic coercion. The scale and complexity of China’s drills reflect the transformation of the cross-strait military balance over the past two decades, as well as the lessons China drew from the previous crisis, when it could do little to deter America from sending two aircraft-carriers to the region, one of which passed ►►



▶ through the Taiwan Strait.

In 1995 China's defence budget was only twice the size of Taiwan's, though China had (and still has) close to 60 times as many people. Today China spends roughly 20 times as much as Taiwan. By the Pentagon's account, the PLA has achieved parity or surpassed America in the number of ships and submarines, long-range surface-to-air missiles and conventional cruise and ballistic missiles it can deploy.

Whether all this means it could conquer Taiwan is unknown. A war game conducted in May by the Centre for a New American Security, a think-tank in Washington, found that in a week of fighting, China was able to land troops on the island but could not reach Taipei, let alone achieve a quick victory. The conflict, set in 2027, settled into a protracted war.

Still, the latest drills served as a warning that China has many ways, short of invasion, to harm Taiwan, especially via a blockade. The exercises covered the approaches to three of Taiwan's most important ports and the airspace that planes use to descend to Taiwanese airports. They "are tantamount to an air and sea blockade", complained a Taiwanese general.

That is a slight exaggeration, but in a sign of how a blockade might play out, commercial shipping was forced to take longer, costlier routes. Ship-tracking websites showed vessels avoiding the exercise zones. It was a reminder of how China could isolate Taiwan, which imports over 60% of its food and 98% of its energy.

One effect of the drills might be to spur more consideration about how to help Taiwan survive a blockade, says Lonnie Henley, formerly of the Pentagon's Defence Intelligence Agency. "Defeating a cross-strait landing operation is hard but relatively straightforward—just sink a lot of ships," he says. "Defeating a blockade is much more difficult because of the location and terrain. My assessment is that China could keep Taiwan sealed off for many months, perhaps years, with devastating effect."

The drills also sparked fresh concerns over the vulnerability of Taiwan's outlying islands, including Kinmen (formerly Quemoy), a cluster just six miles (10km) from China's coast which came under attack by Mao's forces in 1954-55 and again in 1958. On the day of Ms Pelosi's departure, Taiwanese troops on Kinmen fired flares at Chinese drones overhead. The next day Chinese missiles were fired near Taiwan's Matsu archipelago.

China's next moves will probably depend, in part, on how America and Taiwan respond. If it believes they will continue to challenge its red lines (by expanding official contacts, for example), it may well increase pressure on them, says Bonnie Glaser of the German Marshall Fund of the United States, a think-tank. "In the meantime,

### Advantage mainland

Military balance across the Taiwan Strait, 2022

	China	Taiwan
Personnel	2,035,000	169,000
Reserves	510,000	1,657,000
Main battle tanks	5,400	750
Submarines	65	4
Warships*	86	26
Attack helicopters	308	96
Other combat-capable aircraft	2,475	474
Defence spending, \$bn†	270.0	12.1

Sources: IISS; SIPRI

\*Bigger than corvette class †2021

the PLA will have learned many lessons from their military drills," she says, predicting more of the same kind of exercises.

"There will be no return to the status quo ante," says Mr Fravel. He draws parallels with China's response in 2012 to Japan's nationalisation of the Senkaku Islands, which China also claims and calls the Diaoyu. Chinese forces started regular air and naval patrols within 12 nautical miles of the islands.

The challenge for America and its allies will be to resist such Chinese efforts without provoking another crisis. They have so far tried to avoid escalation. Ms Pelosi's flight to Taiwan took a circuitous route that skirted the disputed South China Sea. America does not appear to have sent new warships to the region. The Pentagon also said on August 4th it had postponed a routine test launch of an intercontinental ballistic missile that week.



Message by way of missile

Looking ahead, though, America will need at the very least to resume regular military activities around Taiwan, including transits through the Taiwan Strait, to maintain credibility among its regional allies. The Pentagon's under-secretary for policy, Colin Kahl, said on August 8th that the navy would continue such transits in the coming weeks. That could be a flash-point, especially if China continues its drills around the island.

America is also likely to strengthen Taiwan's defences by selling it more offensive weapons, training more of its troops, and lending or giving it cash to buy more kit, including small, mobile arms like those that have proved so effective in Ukraine. "Confrontation will go to a higher gear," predicted Shi Yinhong of Renmin University in Beijing.

Congress will probably demand more. It is currently considering the Taiwan Policy Act, which would allow the island to join military exercises with America and declare it a "major non-NATO ally", facilitating the provision of more advanced weaponry. It would also authorise "de facto diplomatic treatment for Taiwan equivalent to other foreign governments". China would almost certainly consider any one of those moves as crossing a red line.

America must somehow tailor its response to avoid putting Taiwan further at risk and to maintain cohesion with allies and partners. The G7 condemned China's drills, as did Japan and Australia. But South Korea, another American ally, did not. South-East Asian nations have also been reluctant to take sides, just as many were after the first crisis in 1954-55.

One lesson from previous Taiwan crises is that their consequences are unpredictable. When China began shelling Taiwan's outlying islands in 1958, America intervened again, breaking an artillery blockade on Kinmen by escorting supply vessels. But as Taiwan's leadership pushed for a counter-strike, and America considered using nuclear weapons, the Soviet Union threatened to retaliate and America faced a backlash in the West for risking war over a cluster of islands. Nearly four decades later, the crisis in 1995-96 deterred China from military action in the near term, but fuelled anti-unification sentiment in Taiwan and convinced the mainland to accelerate its military modernisation.

The consequences of the latest showdown may not become clear for years. In the short run there is still hope for a peaceful outcome if each side stages a show of force and then pulls back, claiming victory, as they did in 1996. But over the longer term, with China now determined to consolidate perceived gains around the Taiwan Strait, and America committed to push back, all sides appear to be heading for dangerous waters. ■



### Jihadism

## Al-Qaeda and Islamic State are both digging into Africa

DAKAR AND DUBAI

**Their African franchises are now punchier than those in the Middle East**

**T**HIRTEEN YEARS have passed since al-Qaeda's last big plot against America, a botched effort to blow up New York's subway in 2009. The war in Afghanistan is over. Americans and Europeans are preoccupied with other crises, from Ukraine to Taiwan. But the two Hellfire missiles that killed Ayman al-Zawahiri, al-Qaeda's leader and Osama bin Laden's successor, on a balcony in Kabul on July 31st were a reminder of his group's staying power.

Mr Zawahiri would not have dreamed of watching the sunrise from the luxury of Kabul's diplomatic enclave, had the Taliban not conquered Afghanistan last summer. His safe house was owned by the Haqqani network, a group with ties to Pakistani intelligence. Siraj Haqqani, its leader, is both deputy head of the Taliban and interior minister of Afghanistan. No wonder that Mr Zawahiri, whose communications were once so patchy that many thought him dead, felt secure enough there to release a stream of videos on topics from Syr-

ia's civil war to pro-hijab protests in India.

In one sense Mr Zawahiri's tenure, from 2011 to 2022, was a failure. His group mounted few big attacks in America or Europe for a decade. Nor did it topple any supposedly "apostate" Arab regimes like Saudi Arabia's or Egypt's. The rise of Islamic State (IS) in Syria and Iraq, which had split from al-Qaeda and in 2014 set up a media-savvy caliphate that held territory for several years, made Mr Zawahiri's outfit look like an also-ran.

It is not. "The al-Qaeda terrorist infrastructure we faced in 2001 is long since gone," said Ken McCallum, head of MI5, Britain's security service, last year, shortly

before Kabul fell. But that infrastructure shows signs of revival, according to a UN monitoring team. Al-Qaeda has an "advisory" role with the Taliban, it notes. Al-Qaeda in the Indian Subcontinent (AQIS) has 180-400 members, many of whom recently fought alongside the Taliban.

"We don't have evidence that there is any nascent international attack capability that is starting to blossom in Afghanistan," says Edmund Fitton-Brown, the UN team's co-ordinator. But he notes that Mr Haqqani, as interior minister, oversees citizenship, passports and travel. "This could be a longer game plan" that could lead to fresh acts of terrorism by the likes of al-Qaeda anywhere, planned in Afghanistan.

That will depend on whether the Taliban rein it in, fearful of the consequences of another attack mounted from Afghan soil. But what already distinguishes al-Qaeda's position today, compared with 2001, is the breadth of its activity. In recent years the movement has become remarkably decentralised (see map on next page).

The Sahel, a vast, poorly governed stretch to the south of the Sahara desert, is now the world's terrorism hotspot, accounting for more than a third of all terrorism deaths in 2021. It is home to Jama'at Nasr al-Islam wal Muslimin (the Support Group for Islam and Muslims, or JNIM), a coalition affiliated to al-Qaeda. Last year it was the world's fastest-growing jihadist or- ▶▶

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► ganisation, measured by the increase in the tally of attacks and deaths.

In Mali nearly 2,700 people were killed in conflict in the first six months of this year, almost 40% more than in all of 2021. Last month jihadists attacked a military checkpoint 60km from Bamako, the capital; a week later they hit the country's main military camp on its doorstep. In Niger, deaths in conflict have fallen slightly but will probably exceed 1,000 in 2022. In Burkina Faso in the first half of the year about 2,100 people have been killed. Djibo, a town in the north, is often cut off from Bamako by jihadist roadblocks.

### Crossing the continent

Al-Qaeda is also finding fertile ground in east Africa. Al-Shabab, its affiliate, controls large parts of rural Somalia. General Stephen Townsend, America's commander for Africa until August 9th, told the Senate in March that al-Shabab is "the largest, wealthiest and most lethal al-Qaeda affiliate in the world today". It has "grown stronger and bolder over the past year". In May it overran an African Union base, killing more than 50 people and stealing weapons. In July a force of 500-800 al-Shabab fighters penetrated a security zone maintained by Ethiopia, then crossed 150km into that country with the aim of setting up a base in the Bale mountains.

IS has also spread from its core territory in Iraq and Syria to an array of local conflicts. Its rivalry with al-Qaeda in Syria has abated; both groups struggle to survive there, though thousands of IS sympathisers still lurk among Sunnis aggrieved by the Shias' new dominance in Iraq. And it keenly recruits, funds and influences jihadists in Africa and Afghanistan.

In Nigeria, for instance, Islamic State West Africa Province (ISWAP) has replaced Boko Haram as the main jihadist group. One of its offshoots, Islamic State in the Greater Sahara (ISGS), has mounted indiscriminate attacks in Burkina Faso, Mali and Niger. An IS-linked group has wrought havoc in northern Mozambique. Back in

Afghanistan, most of the 700 people killed since America left a year ago have died at the hands of IS's local branch, IS-Khorasan.

This alphabet soup of local groups can be confusing. The links to their parent organisations are often fuzzy. ISGS, for instance, is really a form of "major gang criminality", argues General Marc Conruyt, who led French forces in the Sahel until a year ago. It wraps itself in a jihadist flag but does not have a clear political project.

Most of the groups that make up JNIM are run by Malians, with local agendas in mind. Among the coalition of groups in JNIM, the one perhaps most closely tied to "core al-Qaeda", as the leadership is known, is al-Qaeda in the Islamic Maghreb. Yet even it largely ignored Mr Zawahiri's entreaties to attack Americans rather than local security forces.

The disconnect between the jihadists' core and periphery may be partly due to counter-terrorism successes. Al-Qaeda's affiliate in Syria, then known as Jabhat al-Nusrah, was unable to communicate with Mr Zawahiri for three years, between 2013 and 2016, says Tore Hamming of the International Centre for the Study of Radicalisation at King's College London. It reached out to other al-Qaeda leaders in Iran but "basically ran its own business". The same is probably true of some African affiliates. In the case of IS, many affiliates even collect money and send it to the central leadership, not vice versa, adds Mr Hamming.

This decentralisation may help keep al-Qaeda and IS alive. America has now assassinated both of al-Qaeda's leaders, the first five heads of IS in Afghanistan, and successive IS leaders in Syria, most recently in February. Yet this relentless decapitation seems to have made little difference.

The two organisations look more diffuse, however, and Mr Zawahiri's successors are unlikely to reverse this trend. Sayf al-Adl, al-Qaeda's heir apparent, and Abdul-Rahman al-Maghrebi, its next most senior figure, both live in Iran, where they are kept on a tight leash by Iranian intelligence. Their freedom to travel, communi-

cate and command may be less than Mr Zawahiri enjoyed for most of his tenure.

Does this centrifugal tendency among jihadists spell more or less danger for the West? Some argue that the violence they perpetrate in places like the Sahel and Afghanistan is dreadful for the locals but a sideshow for the West. "These are areas of limited interest to the United States," says Daniel Byman of Georgetown University. The centrally run jihad of the 1990s against the West that culminated in 9/11 has, in this view, reversed. "Al-Qaeda has become a local group that doesn't really prioritise external attacks," says Mr Hamming.

Western intelligence agencies are less sanguine. The UN monitoring panel reckons that jihadists in the Sahel and elsewhere must be crushed, or "one or more of them will incubate an external operational capability for al-Qaeda or a related terrorist group." Complacency would be unwise. ■

### The United Arab Emirates

## Joule in the rain

DUBAI

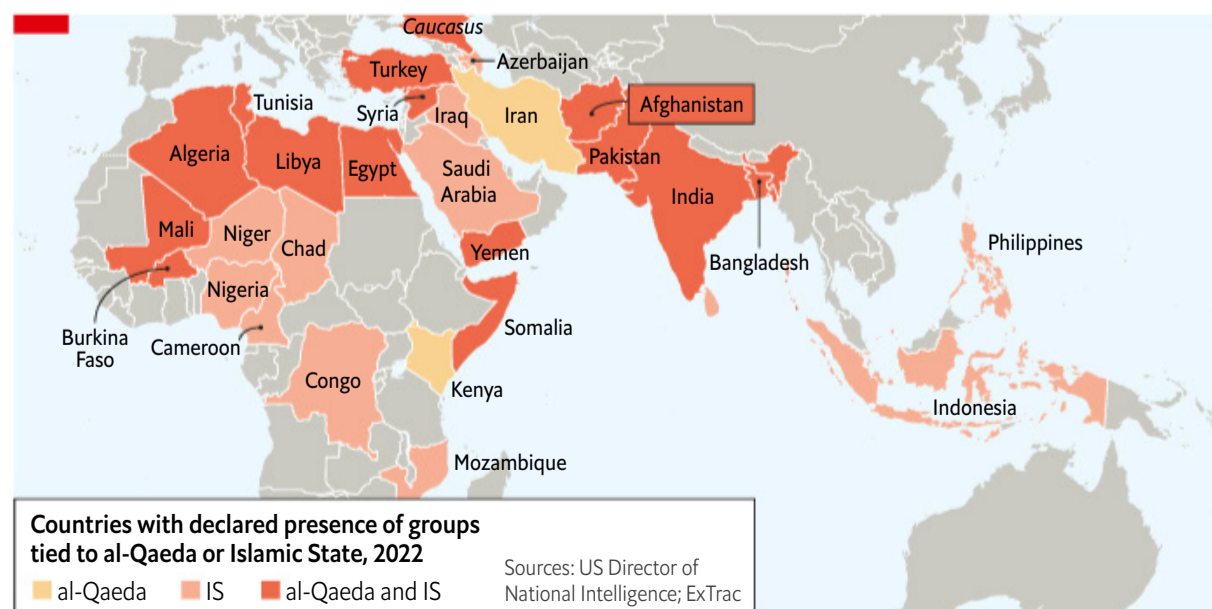
**The Emirates hope to jolt clouds into sharing their bounty in an arid land**

**E**SPECIALLY IN THE SUMMER months, life in Dubai can feel like a denial of nature. The malls, the hotels, even the swimming pools are frosty. But the air outside is baking, with temperatures above 40°C and humidity so thick it fogs glasses and seeps from air-conditioning vents.

The United Arab Emirates (UAE), a seven-member federation of which Dubai is part, wants to put some of that humidity to use. The country has one of the world's keenest cloud-seeding programmes, flying some 200 missions a year from an airfield in Abu Dhabi, the capital. Every week or two, planes zip into the clouds to try to squeeze out a shower. Lately they have been joined by experimental drones: if nature will not share rain of its own accord, the UAE hopes to jolt it into compliance.

Cloud-seeding has been practised for almost a century. South-East Asian countries use it to clear dry-season haze; ski resorts in America to help carpet the slopes with snow. China tried it during the summer Olympics in 2008. Officials wanted to cajole clouds into casting out their contents before they reached Beijing—and ruined the festivities.

In the early days planes would dump dry ice into clouds. Today they carry chemicals, usually silver iodide or other salts. They are meant to attract water droplets, in the hope they become heavy enough to fall to earth as rain. Whether this works is not ►►



► clear. A study partly funded by America's National Science Foundation found that cloud-seeding boosts snowfall under the right conditions. Studies in America, Israel and elsewhere were inconclusive.

The UAE hopes it works. One of the driest countries on earth, it sometimes has less than 100mm (four inches) of rain a year. There are occasional rainy days in winter and brief downpours in summer that break the oppressive humidity. But nature does not provide enough water for a population of about 10m people that is still growing. Most drinking water comes from the sea. So much so that 14% of the world's desalinated water is produced in the UAE.

Climate change might supply a bit more water from the heavens. Over the New Year weekend, parts of the UAE logged as much as 142mm of rain, more than a year's worth, in just three days. Locals saw it as an auspicious start to the year: the Prophet Muhammad considered rain a blessing.

Summer has also brought unusual weather, less cheerfully. Fujairah, on the east coast, saw a freak storm in July that flooded houses and washed away cars. Seven people died. Scientists say climate change may have played a role.

Still, even a rainier UAE will not be rainy enough. Last year the government started fiddling with drones. Instead of dropping chemical payloads into clouds, they deliver an electric shock. The jolt, in theory, could cause droplets to clump together: the same result as old-fashioned cloud-seeding, but without the chemicals.

The UAE insists the chemical version works, even if other researchers are less sure. For Dubai's residents, however, the programme has become something of a running jest. A day at the beach ruined by a freak storm is not simply bad luck; it might merit a complaint to the government. ■



Dubai loves to be drenched

## Kenya's election

# Too close to call

GATUNDU

**The contest is going down to the wire, signalling a momentous shift**

ELECTIONS IN KENYA tend to veer between emotional extremes. The one in 2002 was joyful as voters swept an opposition candidate to the presidency for the first time. A disputed poll in 2007 was horrifying: perhaps 1,400 people were killed in its aftermath. The latest, on August 9th, has unexpectedly turned into a nail-biter.

Opinion polls in the days before the election suggested that Raila Odinga, a veteran opposition leader making his fifth run for president, would stroll to victory with a lead of six to eight points over William Ruto, the deputy president. Cynical sorts, influenced by Kenya's history of iffy elections, reckoned that even if Mr Odinga lost, the establishment would fiddle the count in his favour. Both assumptions seem to be wide of the mark.

In 2017 the electoral commission muddled things so badly that the Supreme Court ordered a re-run. Chastened, it has conducted this vote admirably. Mindful that delays arouse suspicion, the commission published screenshots of results forms filled in by no less than 81% of its 46,229 voting stations within seven hours of the polls closing. This step has allowed for much greater public scrutiny of the counting process. It will surely make it harder for the loser to cry foul.

Although the official result could yet trigger violence, the smoothness of the process so far bolsters Kenya's reputation as east Africa's most robust democracy. As strongmen elsewhere butcher constitutions to remain in power, Uhuru Kenyatta has become Kenya's third president in a row to respect a two-term limit.

Despite Kenya's improving electoral performance, its political system seems to be ailing, corroded by a self-serving and unaccountable ruling class. If anyone had seemed to stand valiantly outside it, Mr Odinga was the man. In previous elections he ran as the main opposition candidate, being beaten into second place each time in contests that did not always look free and fair. This time he changed his tactics by allying himself with Mr Kenyatta.

It seemed like a winning strategy. Mr Odinga, in effect, gained the benefits of incumbency. The harassment his supporters once experienced at police hands was visited on his opponent's instead. Above all, the president's endorsement was expected to give him the support of the Kikuyu, Kenya's largest ethnic group.



Mind the count

Mr Kenyatta holds the most famous Kikuyu surname. His father, Jomo, was an anti-colonial hero who became Kenya's first president. Yet for all his pedigree, the president has singularly failed to deliver to Mr Odinga the Kikuyu vote. Provisional results suggest that he has won a measly 20% of the vote in Kikuyuland.

Mr Odinga's failure to win over the Kikuyu, which has turned what should have been a coronation into a tight race, is not the only surprise in this contest. Perhaps more startling is the success of Mr Ruto in winning votes in Kikuyuland, seeing that the International Criminal Court in The Hague charged him with instigating attacks in which hundreds of Kikuyus were killed after the elections in 2007. (Mr Ruto has denied wrongdoing and the court has since suspended its prosecution.)

Mr Ruto's success among the Kikuyu can be attributed partly to the disappointment many feel about how the president acquitted himself in office. In particular, Mr Kenyatta has struggled to shake off perceptions that he faced a conflict of interest since his family has huge commercial interests, encompassing everything from dairy farming to tourism and banks. "We are ruled by the richest man in the country and yet we are still poor," says Mwangi Githinji, a lorry driver in Gatundu, the Kenyatta family's home town.

If Mr Ruto wins it will signal a momentous shift in Kenya's politics, which have long been sullied by ethnicity. Mr Ruto has campaigned to persuade Kikuyus to forget about the past by tapping into fresh grievances. Presenting himself as the champion of the poor, he won support from have-nots across the country. For the first time, a Kenyan election has been fought—and may indeed be won—as much on class as on ethnic lines. ■

## Ghana and the IMF

## Making a success out of failure

ACCRA AND NGLESHI AMANFRO

## Despite frequent bail-outs, Ghana is surprisingly prosperous

ENU, A SHOPPER at Kaneshie market in Accra, the capital of Ghana, peers into a small bag of scrabbling crabs with disappointment. “Before, if I buy two cedis’ worth, it can make my stew for me,” she says. “Now, no.” As shoppers moan about inflation, traders grumble about slow sales. Many blame the government. “The finance minister, if I catch him, me, I will beat him,” declares Esther, a yam-seller with a twinkle in her eye.

Fully 87% of Ghanaians think the country is going in the wrong direction, according to a survey in April by Afrobarometer, a pollster. The economy is a big reason. Annual inflation hit 30% in June, its highest for 18 years. This year the central bank has increased interest rates by 4.5 percentage points, to 19%, but the cedi has nonetheless fallen by 28% against the dollar.

The government has been slow to face up to the crisis. “We are not going to the IMF, whatever we do, we are not,” declared Ken Ofori-Atta, the finance minister, in February. “We are a proud nation.” On July 1st the government ate its words, asking the IMF for help escaping the pit of debt it has dug itself into. Last year 44% of its revenue went on foreign loans. The unsustainable borrowing, naturally, has scared off lenders, leaving it with few options.

This is familiar territory for Ghana, which has been nannied by the IMF for 22 of the past 35 years. The new programme will be its 17th since independence in 1957 and comes little more than three years after it graduated from its previous one. All of this might suggest Ghana has made a dog’s dinner of managing its economy. Yet its people are the richest in continental west Africa, measured by GDP per person. What’s more, politicians regularly and peacefully hand power over at elections. This makes it a model for how a country can develop and democratise, despite its macroeconomic turbulence.

The government insists that today’s crisis is not its fault. “We were on a very positive trajectory” before the pandemic, says Mr Ofori-Atta. Russia’s invasion of Ukraine and a surge in global inflation compounded the harm, he adds.

Yet Ghana was vulnerable well before covid-19 struck. The IMF had already warned that it was at a high risk of debt distress before President Nana Akufo-Addo took office in 2017. Despite this, his government kept on borrowing. Ghana’s public

debt rose from 56% of GDP in 2016 to 63% on the eve of the pandemic in 2019.

When covid hit, many African governments had little choice but to borrow and spend to support their economies. Ghana did so more than most. Its budget deficit of 16% in 2020 was the second-highest in sub-Saharan Africa, far above the regional average of 6%. This may have helped avoid a recession, but Ghana’s debt is now a thumping 84% of GDP, reckons the IMF.

Mr Ofori-Atta suggests that it is racist to criticise Ghana’s deficit. Rich countries spent far more in absolute terms, he observes. “Do they have a right to do that more than we do because we are African?” He glosses over the fact that rich countries could safely spend more because they raise far more tax than Ghana does.

## Borrowed dime

Ghana’s take in taxes is worth only about 12% of GDP, well below the average of 15% for Africa. It is also perennially vulnerable to foreign-currency shortages because it depends largely on volatile commodity exports—chiefly gold, oil and cocoa.

Moreover, many worry that Ghana does not always spend its money wisely. Emmanuel Gyimah-Boadi, the co-founder of Afrobarometer, who is based in Accra, argues that a good deal of spending before the general election in 2020 was aimed at helping Mr Akufo-Addo win a second term. This would fit a pattern. Before almost every election in recent decades the ruling party has tended to splurge (see chart).

Graft is another recurring worry. Pollsters from Afrobarometer regularly ask Ghanaians how many people they think

are involved in corruption in various institutions, such as the police or religious leaders. When they most recently asked this question in relation to “the president and officials in his office”, more than half of respondents answered “most” or “all”.

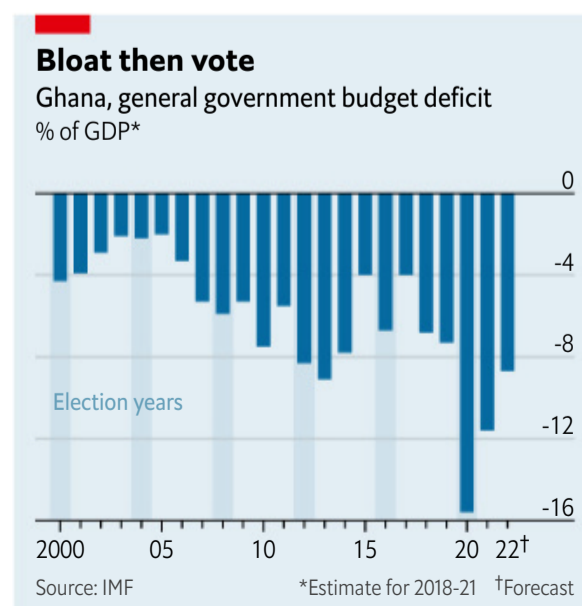
Rich as Ghana is relative to its hard-up neighbours, many Ghanaians reckon they would be richer still if the economy had been managed better. Yet there may be more than meets the eye to Ghana’s unorthodox and imperfect model of big spending interspersed with IMF programmes. Deficit-financed investment can pump up growth for a while. Indeed, some of the borrowed cash has gone into roads, hospitals and free secondary schooling. This may not have boosted growth enough to pay back the debt, but it still brings benefits. The spending has also improved social cohesion, says Mr Ofori-Atta. That is not to be underestimated given the strife in many of Ghana’s neighbours.

Perhaps one explanation for Ghana’s ability to make a success of failure has been its readiness to turn to the IMF before the economy has suffered catastrophic harm. Politicians then blame the fund for prescribing austerity that they know is needed, but would not dare to impose without the cover of an IMF programme.

Ghana’s reputation for peace, democracy and, at times, rapid economic growth has helped persuade creditors and donors that the country is a worthy candidate for debt relief when crises hit, argues Bright Simons of Imani, a think-tank in Accra. Its star image has also brought creditors back after its crises, even when it has not mended its ways, allowing its unorthodox growth model to roll on.

Now the government will find out if it has run out of road. Mr Ofori-Atta does not rule out another debt restructuring, but nonetheless promises that Ghana will soon resume borrowing from private creditors. Yet each bail-out dims its star. That may be why the government is so determined to blame covid for its current pickle. Mr Ofori-Atta also blames rating agencies for forcing Ghana back to the IMF: his ministry says they have an “institutionalised bias against African economies”.

Even if Ghana’s odd model has had its benefits, many Ghanaians are tiring of the cycle of pork-barrel politics followed by IMF interventions. Almost half of Ghanaians are dissatisfied with the way democracy works, by far the highest share since Afrobarometer began polling in 1999. Adia, who runs a tiny shop an hour outside of Accra, was once a “full supporter” of Mr Akufo-Addo. But she no longer believes in him or the system, she says, as she pounds fufu, a starchy staple. On the next election day her plan is simple. “I will pound fufu,” she says. “After eating the fufu, I will lock my door and sleep.” ■





## Conflict in Ukraine

# The rungs of escalation

WASHINGTON, DC

### What would push the West and Russia to nuclear war?

“THE WORD ‘impossible,’” quipped Oleksii Reznikov, Ukraine’s defence minister, “means ‘possible in the future.’” Javelin anti-tank missiles, forbidden by America when Vladimir Putin took the first chunks of Ukraine in 2014, came in a trickle from 2017 and then a flood when he invaded again in February. Stinger anti-aircraft weapons, similarly refused, arrived in March. And the long-awaited HIMARS rocket launchers have been taking out command posts and weapons dumps far behind Russia’s front lines since June. F-16 fighter jets may come one day.

America and Europe hail Ukraine’s fighting spirit, which raises a nagging question: why are they not sending more weapons, more quickly? The latest \$1bn American military package for Ukraine includes munitions for HIMARS but no more launchers beyond the current 16, which many experts think insufficient. Officials’ answers vary: the West is giving priority to weapons that are most urgently needed; it has to train Ukrainians to use and maintain their new kit; and they have to show they can use it effectively in battle.

The strongest reason for America’s caution, though, is fear of escalation—that Russia might lash out militarily at NATO (“horizontal escalation”, in the jargon) or use chemical or nuclear weapons in Ukraine (“vertical escalation”). Either version would almost certainly draw NATO into direct conflict with Russia, and President Joe Biden has vowed to avoid “World War III”.

Ukraine’s looming effort to reconquer Kherson is a test. If successful, hawks will see it as proof that Ukraine, given the right help, can win. Doves fret that it could provoke Mr Putin to greater villainy.

On the day he invaded Ukraine Mr Putin

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threatened outsiders thinking of intervening with consequences “such as you have never seen in your entire history”. State media in Russia fantasise about nuclear strikes on the West. For now, though, America says there is no sign that Russia has put its nuclear forces on higher alert. America and Russia still swap information about their long-range nukes. Mr Biden has called on Russia to resume arms-control talks. Russia said sanctions prevent the resumption of on-site inspections.

Over five months of fighting, the threshold for a direct clash has repeatedly shifted, without dire consequences for the West. “NATO has been brilliant at salami-slicing its assistance,” says James Acton of the Carnegie Endowment for International Peace, a think-tank. “It has given the Ukrainians a fair amount of support, but at no time did it present Russia with a point at which they could say, ‘No further.’”

Not all agree. “Every salami-slice means that more innocent Ukrainians are killed,” retorts Ben Hodges, a former head of the American army in Europe. He says the Biden administration “has overstated the risk of escalation”. Russia does not want to take on NATO, he says, and a nuclear response is highly unlikely.

Others caution that Mr Putin may escalate rather than accept defeat. Samuel Charap of the RAND Corporation, a think-tank close to the Pentagon, says Russia has unused military capacity. The air force could also be committed more fully. The more the West helps Ukraine, the more Russia ▶▶



▶ will raise the stakes. “There is no stable equilibrium,” argues Mr Charap. “We are in a slow-moving, incremental escalation.”

History suggests that countries can go a long way in waging proxy wars against nuclear powers without atomic retribution (albeit with scares). Think of Russia and China supporting North Vietnam against America in the 1970s; or America arming the Afghan *mujahideen* to bleed the Soviet Union in the 1980s.

Russia’s published doctrine envisages four scenarios for the use of nuclear weapons: detection of a ballistic-missile attack against Russia or its allies; an attack on them with nuclear or other weapons of mass destruction; actions that threaten its nuclear command-and-control systems; and “aggression against the Russian Federation with the use of conventional weapons when the very existence of the state is in jeopardy”.

The West’s arming of Ukraine falls well short of those red lines. Yet the concept of an existential threat is elastic, notes Bruno Tertrais of the Foundation for Strategic Research, a think-tank in France. Mr Putin has called Ukraine “a matter of life and death”. He has also suggested that a major attack on Crimea, which Russia annexed in 2014, would be similarly grave (explosions rocked an airbase in Crimea on August 9th; see picture). Others ask, what if Mr Putin regards himself as the state, so that any danger to his regime is deemed an existential threat to Russia?

A recent RAND paper by Mr Charap and others sets out four scenarios of horizontal escalation. The first is labelled “Pathway 0” because the escalation spiral may already be under way: Russia is bound to respond to military and economic losses inflicted on it, if not now then “in due course”. Next is a pre-emptive attack by Russia if it thinks NATO is about to intervene, after it deploys missile systems near the Russian border, say. Third is hitting Western military supply lines that support Ukraine. Last is “a dramatic increase in domestic, economic, and political instability in Russia”.

In most cases Russia’s retribution would probably begin covertly—through cyberattacks, sabotage, assassination and more. The pre-emption scenario is most likely to provoke a military attack, perhaps even a nuclear strike. The scenarios may overlap and “all are more dangerous if Russia is losing,” adds Mr Charap.

In truth, nobody knows where Mr Putin’s red lines lie. Perhaps not even he does. America has stopped talking of helping Ukraine “win” and of weakening Russia. Instead it speaks of ensuring Ukraine does not lose. In the *New York Times* in May Mr Biden listed many things America would not do. It would not seek to unseat Mr Putin, nor send troops to Ukraine, nor fight against Russia, nor help Ukraine strike at

Russia. It would not “prolong the war just to inflict pain on Russia”. Mr Biden warned Russia that using nuclear weapons “would entail severe consequences”. A response would depend on the circumstances, but officials whisper it may involve conventional rather than nuclear strikes. Plainly, Mr Biden does not want to get to that point.

While steering around these self-imposed limits, Mr Biden has left his destination unclear. Sources say officials are conducting war games to decide their ultimate objective. For now the administration speaks in bromides, saying it wants “a democratic, independent, sovereign and prosperous Ukraine”. It does not adopt Ukraine’s demand for the return of all lost territories, including land Russia took in 2014. Intentionally or not, Mr Biden’s policy is likely to generate a long war or a grinding stalemate. This risks the unity and staying power of Western countries if voters revolt against stagflation, energy scarcity and the bill for supporting Ukraine. That may be Mr Putin’s plan.

Yet frustration and uncertainty are in the nature of nuclear dissuasion: America is deterred from intervening directly; Russia from striking at NATO. The late Tom Schelling, an economist and nuclear strategist, argued that the brink of war can be unknowable. It is not “the sharp edge of a cliff where one can stand firmly, look down, and decide whether or not to plunge”; instead it is a slippery curved slope where “neither the person standing there nor the onlookers can be quite sure quite how great the risk is.” When the peril is a catastrophic nuclear exchange, who can blame leaders for treading carefully? ■

## Conscription in Donbas

# Putin’s disposables

DNIPRO AND KYIV

## Russia is forcing Ukrainian conscripts into battle

SASHA MOSTLY kept to himself. The 18-year-old engineering student from Donetsk, a city in eastern Ukraine controlled since 2014 by Kremlin-backed separatists, had no patience for politics. “We were not for Russia, and we were not for Ukraine,” says his mother, Natalya. “We were never interested in the war.” Yet on February 23rd—the eve of Russia’s invasion of Ukraine—officials from an army recruitment centre turned up at Sasha’s university. They ordered him to report for duty the next day.

Natalya was told that her son would take part in exercises, then return home. In fact Sasha was sent to the front, near Kharkiv, a Ukrainian city that has been devastated by Russian attacks. Every few days Sasha would call his mother to say he was okay. The last such call came at the start of April. The next came from a prison camp in western Ukraine. Sasha had been captured.

He is luckier than others. Since the start of the war Russian forces and leaders in the occupied “people’s republics” of Donetsk and Luhansk are said to have mobilised some 100,000 men. Ukrainian officials say 25,000 conscripts from the occupied territories have been killed or are missing in action, an improbably high figure. Russian ▶▶



## Explosions in Crimea

On August 9th explosions lit up a Russian airbase in Crimea, the peninsula in the Black Sea that Russia seized from Ukraine in 2014. At least eight aircraft were destroyed. Ukraine’s government declined to say clearly if its forces had attacked the airbase, which lies more than 100 miles (160km) from the front lines. It is the first such incident to take place in Crimea since Russia’s current invasion of Ukraine began in February.



► sources mention about 3,000 dead, an improbably low one. But data suggest that Ukrainians from the separatist republics are dying at a higher rate than troops from Russia. By June 2022 more than half of the original members of the Donetsk militia had been killed or wounded in combat, reckons Britain's defence ministry.

Ukrainian officials say that conscripts from the "people's republics" are sent into battle ahead of others, to draw artillery fire and force the Ukrainians to disclose their positions. "It's very convenient for Russia, because they don't lose their troops," says Oleksiy Arestovych, an aide to Volodymyr Zelensky, the Ukrainian president. "It's Ukrainians killing Ukrainians."

Pro-Russian sympathies run deep in Donetsk and Luhansk. Thousands of the men Russia has deployed to the eastern front are loyalists who have seen action frequently since 2014. Many of them have welcomed the chance to fight Russia's war. But interviews with relatives and activists suggest that most of the new conscripts are unprepared, underequipped and unwilling. "He told me many of them did not know how to use weapons, and nobody wanted to fight," says Alina, a woman whose brother, a schoolteacher from Donetsk, also ended up in Kharkiv. "Their commanders told them they would be shot if they turned back."

At the start of the invasion factories in Donetsk were asked to assign half their workers to war duty. Some 80 artists from the Donbas region, half of them musicians from the local philharmonic, were also conscripted. According to a story in *Novaya Gazeta*, an independent Russian newspaper, most are wounded or dead. Some conscripts have been given weapons and uniforms dating back to the Soviet era, and perhaps even the second world war.

In March groups of women, outraged that their husbands had been sent to the front, repeatedly confronted officials in Donetsk and Luhansk. Their protests esca-

lated when the first bodies returned. Conscription was reportedly paused as a result. But now it seems to be restarting, albeit more cautiously. On August 1st 21 men were enlisted in Donetsk, says Pavel Lisyansky, of the Eastern Human Rights Group, a watchdog. Conscription also seems to have begun in bits of eastern Ukraine that Russia has only recently captured, says Mr Arestovych. That includes the cities of Lysychansk and Severodonetsk, which were taken in June and July.

Protests against conscription in the "people's republics" have died down. Some of the women involved have been arrested. Russian media claim they were part of a Ukrainian "intelligence operation", and say they could serve 20 years in prison for treason (*The Economist* has changed the names of conscripts and their relatives). But locals are using social media to share information that can help men aged 18-55 avoid army recruiters. Natalya considered hiding Sasha, she says, but decided it was not worth the risk. "They told us he would only be away for two weeks." ■

### Trauma in Ukraine

## Minds in pieces

KYIV

**The harm to mental health is only just becoming clear**

EDUARD CANNOT remember exactly how he ended up approaching a Ukrainian military checkpoint and shouting: "Putin is my president." The fashion designer recalls growing panicked as war raged outside his home in northern Kyiv. He would cry uncontrollably at the news. He became obsessed with Russians, who were then advancing on the other side of a nearby forest. Perhaps he was searching for them when he left his home, in pyjamas, and went to Ukrainian positions in the woods. Instead, he remembers saying he was looking for Katya Chilly, a pop singer, before announcing his support for Russia's president. The soldiers roughed him up.

That afternoon Eduard was admitted to a psychiatric hospital in Kyiv. Yaroslav Zakharov, a doctor who saw him, says his case is hardly unique. War has affected every Ukrainian. Stress is making people who were already at risk of mental illness more vulnerable. "People like to control things, and war doesn't let you." Ukraine's health ministry is already predicting that 3m-4m people will need to receive drugs to manage mental-health problems resulting from the war. Some 15m will require other kinds of psychological support.

Dr Zakharov's hospital was busy during

a visit in late July. A soldier had just been admitted, having turned firearms on a colleague on the front line. But things were even worse during the battle for Kyiv in March, when missiles were landing all around the building. The doctors spread resources as best they could. They discharged all but the most dangerous patients. There were tragedies. One of the discharged men, who had a history of mental illness, hanged himself after discovering that his home had been ransacked by Russian soldiers.

Eduard says that many of the patients he met in the hospital were from Bucha or Irpin, suburbs of Kyiv where occupying Russian forces committed atrocities. They included men of all ages and backgrounds. One friendly group got it into their heads that Eduard was God. "They introduced themselves one by one: this is Archangel Michael, and this so-and-so is Archangel Gabriel." Others were too traumatised to speak, but welcomed Eduard with small gifts: apples, tea bags, coffee, socks. One young patient would bring him one-kopek coins.

Ukraine's government has sent mental-health specialists into some of the worst-hit towns. Nataliya Zaretska, a psychologist, has been working in Bucha for three months. She expected her programme to end after six months, but demand is so high that she has opened a new mental-health centre in the town. She works with soldiers who have returned after being tortured in captivity, and locals who have been prisoners in their own homes.

There are few things as dangerous for mental health as feelings of betrayal and disillusionment, says Olena Nahorna, a colleague of Ms Zaretska who is embedded with Ukrainian troops in Donbas. Before the war "a lot of Ukrainians saw Moscow as a neighbour, albeit an eccentric one," she says. "It was a personal tragedy when that eccentric friend burst into their homes and started killing them." Those who understood from the start that Russia was an enemy have coped better than others with the horrors of the war, she argues.

Ms Nahorna identifies one consolation: the national unity forged by shared trauma. Eduard says his experience has brought clarity. "I realise I could be dead, that soldiers might have shot me, and that is a big kick up the backside." His doctor agrees, but says it is too early to know the extent of his trauma. He says Mr Putin has dropped a delayed-action bomb on the psyche of every Ukrainian.

The doctor, close to tears, says he tried to enlist in the army himself. He was persuaded against it by a former patient now fighting in Donbas. "She told me I needed to take good care of myself, that I would be needed by all of them when the war is over." She was right. ■

## Italy's election

## Defeat foretold

ROME

## Can anything stop the radical right?

ITALY'S POLITICS can be bewilderingly complex. Five big parties and many small ones will compete in the general election on September 25th. Before that they will shuffle into an uncertain number of electoral alliances. Yet already the race to replace Mario Draghi's fallen government is boiling down to one question. Is there anything her adversaries can do to prevent Giorgia Meloni, leader of the hard-right Brothers of Italy (Fdi) party, from becoming the next prime minister?

Ms Meloni's party is part of an alliance that also includes the nationalist Northern League, Silvio Berlusconi's Forza Italia party and some smaller parties. Polling currently suggests that this group could win more than 45% of votes, which should be enough for a majority in parliament. On July 27th the alliance renewed an agreement which dictates that, should they triumph, the leader of the party with the most votes will become prime minister. Ms Meloni's party is polling around ten percentage points ahead of the League and 15 points ahead of Forza Italia.

The centre-left Democratic Party (Pd), led by Enrico Letta, a former prime minister, is about as popular as the Fdi. Both could get around 23% of votes (see chart). But Mr Letta's efforts to build a broad electoral alliance are in ruins, in part because Italy's progressives seem incapable of burying their differences. On August 7th Carlo Calenda, a businessman-turned-politician who left the Pd to form a centrist group, Azione (Action), said he was pulling out of an electoral pact with the Pd that he

had sealed with Mr Letta just five days earlier. He said he disapproved of deals that Mr Letta had subsequently made with three other small parties. Mr Letta responded drily, "The only possible ally for Calenda is Calenda."

The Action party may now link up with Italia Viva, a small centrist group led by Matteo Renzi. Mr Letta has never forgiven Mr Renzi for ousting him from the premiership in 2014 and has not sought to include Italia Viva in his alliance. The absence of Action and Italia Viva means his alliance will sit firmly to the left, which limits its appeal among centrist voters. Polls suggest it could end up with less than 30% of the vote. But Mr Calenda's antics have diverted attention from the real issue, says Antonio Noto of Noto Sondaggi, a polling firm. "The only centre-left alliance

with a real chance of victory would need to take in the Five Star Movement."

The centre-left under Romano Prodi won general elections in 1996 and 2006, defeating Mr Berlusconi, then the main figure on the right. But Mr Prodi did not have to cope with the Five Star Movement, which was founded in 2009 with the eccentric aim of installing an internet-based system of direct democracy and which continues to defy easy categorisation. Although its support has slumped from the 32% it won at the previous election, the polls still give the Five Star Movement 10% of the vote. Mr Letta has said that its role in bringing down Italy's most recent government disqualifies it from his alliance. But without its support the Italian centre-left looks condemned to what Mr Noto calls "a defeat foretold". ■

## Gastronomy

## The great French mustard shortage

DIJON

## A vain search for a condiment in its home town

DIJON, THE historic capital of Burgundy in France, might seem a good place to find a pot of the world-famous mustard that bears the city's name. Since the spring supermarkets across France have run short of the sharp, pale-yellow condiment. Surely shops in Dijon, where the craft of the *moutardier* dates to 1634, must sell the stuff? "None," says a shopkeeper, pointing to empty shelves: "A delivery this morning sold out within the hour." "Ah non!" says another, "we haven't had any for weeks." In a third shop, an apologetic assistant suggests an alternative: a squeezable bottle of sauce from a manufacturer that boasts of creating "flavour experiences". "It's not Dijon mustard though," he says regretfully. The brand is French's—America's favourite.

The mystery of the missing Dijon mustard has gripped France for months. Shops that get stock will sell only one pot per customer. Humorous clips about ways to circumvent rationing fly around social media. Amateur cooks scramble for an alternative ingredient to prepare vinaigrette, mayonnaise, or *steak tartare*, a dish made of raw meat that is also seasoned with egg yolk and capers.

The French eat a kilo of mustard each per year. The type they like has a nose-tingling kick. They do not much care for the milder, sweeter sauce that is slathered on hot dogs in America. Hence the problem. French manufacturers get 80% of the brown mustard seeds (*brassica juncea*) they need to make Dijon mustard from Canada, where a drought last year halved the harvest. Russia's invasion of

Ukraine has prevented French importers from turning to suppliers in those two countries instead. Local farmers cannot compensate, says Luc Vandermaesen of the Burgundy Mustard Association: "The market is totally dry; there are zero stocks, nothing."

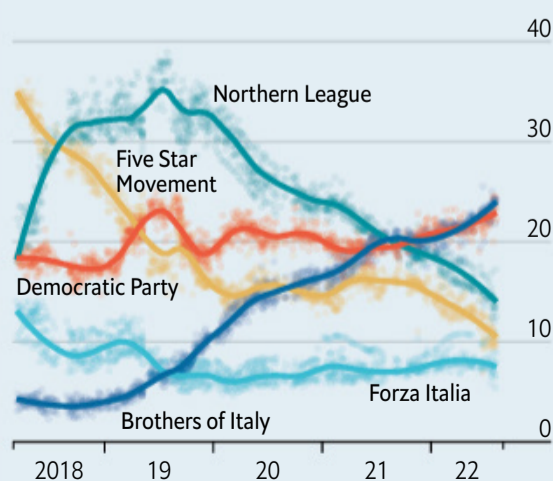
Helpful shopkeepers in Dijon suggest that Moutarde Maille, a shop selling only the famous brand established in 1747, might be the place. Indeed, rows of speciality mustards line its shelves, flavoured with garlic, lemon or truffles, but plain Dijon mustard has sold out. The French are unlikely to see stocks replenished until 2023 at the earliest, predicts Mr Vandermaesen. In the meantime, the milder version may be their only option—even if it is not the kind on which they are, er, mustard keen.



Savour it while you can

## Meloni on the march

Italy, voting intention in general election, %  
Main parties



Source: National polls

## Charlemagne | Feeling the heat

*A changing climate is bad news for a continent that doesn't much like change*



ECONOMISTS VISIT time-tested haunts when they want to get a feel for how Europe is faring. The bourses of Milan or Paris provide a barometer of investor sentiment. Counting container ships coming into Rotterdam and Marseille gives a clue as to the hale-ness of trade. Frankfurt, where the European Central Bank sets interest rates, is worth a (brief) visit. Number-crunchers also drop into finance ministries in Athens or Dublin, where national budgets are crafted—and Brussels, where Eurocrats opine on them, before bond vigilantes in the City of London issue their own verdict. A detour via the Champs-Élysées in Paris or the Gran Vía in Madrid to see if shoppers are splurging completes the road trip.

To that list add Kaub in western Germany. In medieval times the town on the bank of the Rhine began making money from charging barges navigating between the Netherlands and Switzerland. Now a gauge there provides a benchmark for water depth all along the 1,200km-long river. Repeated heatwaves and months of lacklustre rain and snowfall have pushed the measured depth at Kaub down to around 50cm. That is barely a shin's-worth and just a quarter the usual reading at this time of year. Economists have joined meteorologists in keeping a close eye. Already ships carrying everything from car parts to chemicals up and down Europe's main industrial valley are having to travel with half loads or less to avoid scraping their hulls on the riverbed. A further decline in water levels—which is all but inevitable as the year progresses—would make the river unnavigable. A lesser snarl a few years back caused German GDP growth to dip noticeably until it was resolved.

For months Europe has braced itself for the coming winter, wondering how to keep homes warm and factories humming without full deliveries of Russian gas. Summer has turned out to be an unexpected challenge. Freakish heat of the sort made likelier by climate change has had the continent sweltering for weeks. The ensuing drought—less than one centimetre of rain fell across France in July, the lowest of any month in over six decades—has worsened many problems Europe already faces as a result of the war in Ukraine and the reverberations of covid-19. Even more uncomfortable than sitting in the blazing midday sun is the prospect of Europe having to adapt to a warmer world. Change is coming, and Europe does not like change.

The immediate concerns are around what is happening to food supplies, energy and the cost of living. European farmers are rarely shy about letting politicians know their gripes: slopping manure across highways and in front of parliaments is a pan-continental tradition. This time they have a point. Crops are having to be picked before they bake in the sun, never mind the measly yields. Limits on irrigation are widespread. The levels of the River Po in northern Italy are so low that saltwater from the Adriatic has crept up its channel, threatening Italy's breadbasket; an agricultural union has warned that conditions are threatening 30-40% of the seasonal harvest. Swiss farmers are flagging a potential shortage of Gruyère cheese because of reduced milk production. Food prices that should be declining as Ukraine starts shipping at least some of its stored grain may stay high instead.

Europe is rich and can replace what food it cannot grow. The same may not be true of energy. Sizzling heat forced France to throttle some of its nuclear plants: the water drawn from rivers to cool reactors could not safely be returned to those already steamy waterways without parboiling fish. (Amid a shortage of power the rules were relaxed on August 8th.) Norway is worried about low reservoir levels. It has warned that it could cut exports of hydroelectricity to places such as Germany. The power crunch in Europe's largest economy could be remedied by burning coal—if only barges carrying the stuff could navigate down the Rhine. Partly as a result, energy prices remain stubbornly high.

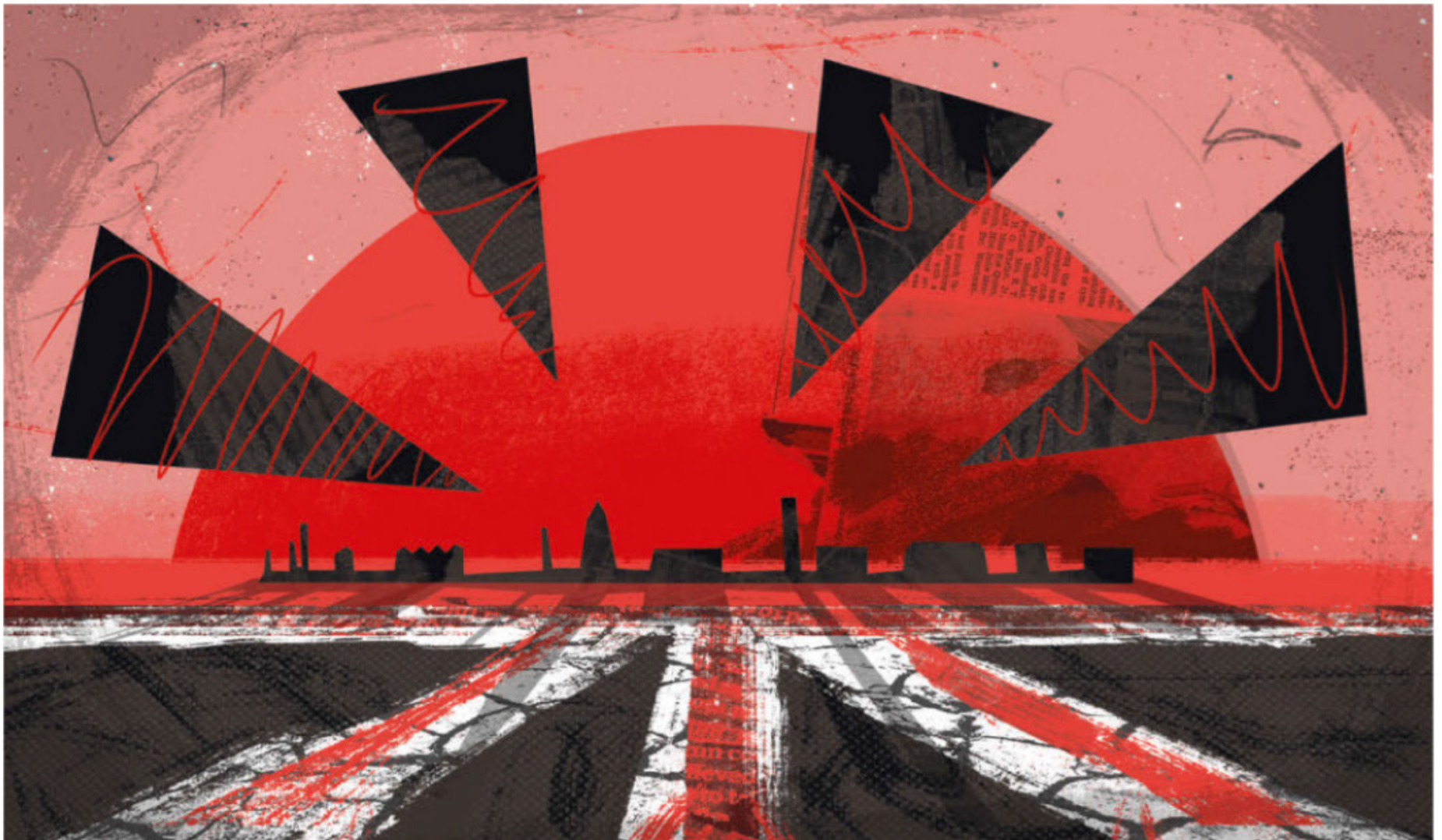
Adapting in the short term is a question of making do without too much added expense. Problems with Rhine barges, for example, can be alleviated by using lorries to lug stuff instead. But it turns out that this bit of the supply chain has been caught up in the post-covid recovery: there is a shortage of drivers. When it doesn't rain, it pours.

### Eins, zwei, dry

The threat of climate change to Europeans has until now been just that: a threat. Quite rightly, much effort has been expended on mitigation. Notwithstanding the odd reopened coal-fired power plant in recent months, the EU seems intent on hitting "net zero" emissions by 2050, with a hefty cut by 2030. But if adaptation was discussed in Brussels and national capitals it was largely to help poor countries deal with rising seas or worse typhoons. A cheque could always be written, sympathy expressed for the kind of countries whose economies can still be derailed by the weather.

However, Europe is now the one in a tight spot. Many poor places are growing fast, perhaps the handiest tool for adaptation to any sort of change. Europe is not. Rich peers such as Japan and America have long histories of dealing with natural disasters, whether hurricanes, earthquakes or sizzling sunshine. European homes mostly eschew air-conditioning. At worst they must put up with local floods, occasional wildfires or the nippy winters in Scandinavia. Whereas America is a land proud of its constant reinvention, Europe has a penchant for keeping things the way they are. Green types oppose dredging rivers. Time-old customs are upheld, even as temperatures change. Champagne can only be made in the eponymous region of France, say—never mind that its climate may soon not be as well suited as places farther north.

No economic history of Europe is complete without a mention of its temperate climate, fertile soils and waterways serving as cheap early highways. It was the lucky continent, as these things go. Perhaps not for much longer. A place that mostly has not thought about the weather will need to start doing just that. ■



### State of the nation

## The summer of discontent

SOUTHAMPTON

**As the country struggles with high prices and temperatures, the state seems to be falling apart**

IN SOUTHAMPTON 20-odd people are picketing Red Funnel, a ferry company that carries people to and from the Isle of Wight, off the south coast of England. The strikers complain about their pay and treatment. But they are most exercised by the rapidly rising cost of living. One young woman says that she went into debt to attend a friend's wedding. A man describes watching his electricity meter in horror, knowing that a big bill is coming. "Everyone's just had enough," he says.

The sun pours down on the strikers. Britain as a whole has had a hot, dry summer; southern England extremely so. A weather station west of Southampton recorded no precipitation in July—the first zero monthly reading since it began operating in 1957. On August 5th Southern Water, the local supplier, banned residents from watering their gardens or washing their cars with hoses. Other water companies will follow.

It has not been a long, hot summer in the American sense—the country has thankfully seen no large-scale disturb-

ances. Instead it is a season of drift and dysfunction. Dry weather has combined with inflation, industrial disputes, transport snafus and political paralysis. As Michael Gove, until recently a cabinet minister, admitted last month, parts of the state are barely functioning. It is Britain's summer of discontent.

For the middle-aged and old, the inescapable comparison is with the summer of 1976. This year's peak temperature, of 40.3°C, has been considerably higher—the extreme heat probably helps explain why the last two weeks of July saw 3,000 more deaths than expected. But 1976 had a worse

→ Also in this section

48 An economy under siege

50 Bagehot: Interest rates and the Tories

→ Read more at: [Economist.com/Britain](https://www.economist.com/Britain)

— The revival of stop-and-search

— Households' water usage

drought. As well as hot weather, it too was a period of high inflation, industrial unrest and political turmoil: the prime minister, Harold Wilson, had unexpectedly resigned in the spring. The weather fused in people's minds with other problems. Bernard (now Lord) Donoghue, a political adviser, lay awake at night, "too hot to sleep", worrying about the pound.

Inflation is what keeps people tossing and turning today. Consumer prices rose by 9.4% in the year to June, driven in part by wholesale energy markets. The government has so far opted to help mostly by providing grants to households, with additional benefits for the poorest—a contrast to countries such as Germany, which have slashed fuel duty. Britain's approach is better targeted and does not incentivise energy use as much. But it makes for scarier headline figures. Energy-price inflation in Britain stands at 57%, compared with 42% in the euro area, according to the OECD, a club of mostly rich countries.

A wide range of goods have become more expensive. The price of milk (a favourite question for interviewers who want to discover whether a politician has their ear to the ground) rose by 21% in the year to June. As some products rise in price, others shrink in size. *The Grocer*, a trade publication that tracks such things, finds that own-brand ready meals at Tesco, Britain's largest supermarket, have shrunk from 800g to 750g and from 450g to 400g.

Industrial unrest is spreading as work- ▶▶

ers try to keep ahead of rising prices, or at least ensure that they do not fall too far behind. In 2019, the last year for which official records exist, 234,000 working days were lost to labour disputes. Railway workers alone could drive this year's figure higher. More than 40,000 walked out on June 21st, the start of a series of ongoing stoppages. Postal workers will soon follow. The Royal College of Nursing is balloting its 465,000 members about a strike, which would be the first in its history.

Nobody on the Red Funnel picket line in Southampton can remember a previous strike; the company says that the last one was in 1966. Ian Woodley, the regional organiser for the Unite union, is surprised by the speed at which young workers have been radicalised: "They've never been in a union before, let alone on strike." He suspects that workers have been emboldened not just by leaping living costs but also by Britain's tight labour market.

Whereas some are angry about pay, many are quietly grumpy about the state of public services. Over the past five years the proportion of Londoners who think that the police can be relied upon has fallen from 79% to 57%. Two years ago, during the worst of the covid-19 pandemic, Britons felt warmly towards their local councils. That did not last. In June only 52% said their council acted on residents' concerns—the joint lowest figure for a decade, in a survey conducted three times a year. In your correspondent's street, the weeds that grow on the edge of the pavement are almost two metres high.

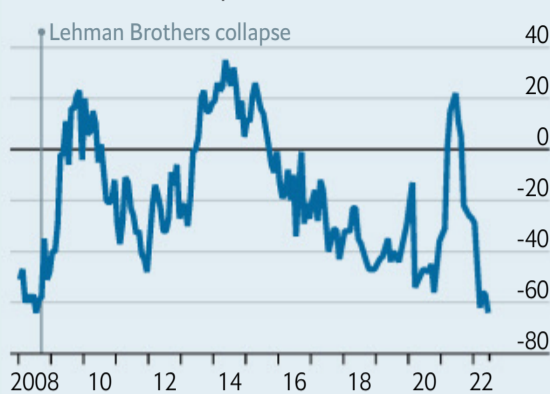
If the National Health Service is the closest thing England has to a religion (as Nigel Lawson, a politician, once put it) the country is falling into unbelief. Only 36% of people are satisfied with the NHS, the lowest figure since 1997. Fully 6.6m are on a waiting list for treatment, up from 4.4m on the eve of the covid-19 pandemic. Ambulances are supposed to respond to "category 2" incidents, such as suspected heart attacks and strokes, within 20 minutes. The average in June was 52 minutes. One in ten waited for at least 1 hour and 54 minutes.

Feelings about general practitioners, as family doctors are known in Britain, have deteriorated to levels never recorded before. In the spring 47% of patients said they had found it hard to make an appointment with their practice, up from 19% ten years ago. GPs have been swamped, not just by patients who stayed away during the worst of the pandemic and are now turning up ill, but also by the millions of people who are waiting for hospital treatment. "Other doors are shut, but the GPs' doors are open," says Dan Wellings of the King's Fund, a health-care think-tank.

Britons might wish to escape such problems by going abroad. But airports have cancelled flights for lack of staff. Dover, the

## Sundowner

Britain, Economic optimism index\*



\*Share of people who think the economy will improve in the next 12 months minus the share of people who think it will get worse  
Source: Ipsos

main seaport for continental Europe, has seen long queues for passport checks. Even getting a document can take many weeks, as the Passport Office buckles under high demand. The 28,000 members of "Passport Appointment Help", a Facebook group, swap sob stories and advice for speeding up the process, such as hassling MPs or turning up at passport offices without making an appointment.

Meanwhile the government idles. Boris Johnson, whose term as prime minister will end in early September, spent part of the summer on holiday in Slovenia. The competitors for his job, Rishi Sunak and Liz Truss, have begun to sketch plans to help with high energy bills. Ms Truss's in particular are heavy on tax cuts, which says more about the enthusiasm for that measure among Conservative Party members than about its appropriateness. Party obsessions dominate their debates. At one hustings in Exeter the audience was implored to avoid traditional Conservative subjects such as tax cuts and Europe. The



very next question was about fox-hunting.

Britain's travails are of two types. Some, such as the hot weather, the passport delays and even the political paralysis, are likely to ease in the autumn. The crush at Dover, for instance, was partly the result of a sudden resumption of pre-covid holiday habits, aggravated by Brexit and poor planning (see later story). But other problems, such as inflation, industrial unrest and the dire state of some public services, are more likely to persist and even deepen. That is where the historical comparison is particularly worrying.

Some things that seemed bad in the summer of 1976 soon became worse. A dispute at a photo-processing firm in west London swelled to include workers in unrelated industries, such as coal miners, and turned violent. It was a foretaste of more widespread strikes three years later, and of the miners' strike that began in 1984. There was violence at the Notting Hill carnival in August 1976, which some observers blamed on aggressive policing. The police carried on behaving much as before. Five years later Brixton exploded in a much more destructive riot.

## Tricks on the mind

Most people expect Britain's economic ills to linger (see chart). In its monetary-policy report on August 4th, the Bank of England warned of a prolonged recession and said it expected the inflation rate to reach 13% later this year. Cornwall Insight, an energy consultancy, projects the energy price cap (which is not a true cap, but an indication of the annual bills paid by the average household) to more than double from £1,971 (\$2,380) at present to £4,427 next April. The NHS will probably come under great pressure in the winter.

So the summer of discontent could be followed by a worse winter and spring. But that is unlikely to be how it is remembered. Last year Phil Andrews collected people's reminiscences about 1976 for a book. He dredged up a few unpleasant recollections of fires, droughts and terrible violence in Northern Ireland, but many more benign ones. People seem to have remembered the glorious sunshine more than the drought. Punk rock and swarms of ladybirds had lodged in their minds longer than strikes and inflation.

North of Southampton, the grass at the Hampshire Hogs' cricket ground has changed from green to the colour of milky tea. This suits some people. The club is saving money on mowing, which is welcome given the high price of diesel fuel. And batsmen love the way the ball runs quickly across the dry outfield, says Peter Came, the club president. He too remembers the summer of 1976. It was the first time, on a similarly parched ground, that he managed to score 100 runs. ■



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Safer with Google

The British economy

# Electric shock

## Spiralling prices and deepening gloom

### BRITAIN'S GROWTH CRISIS



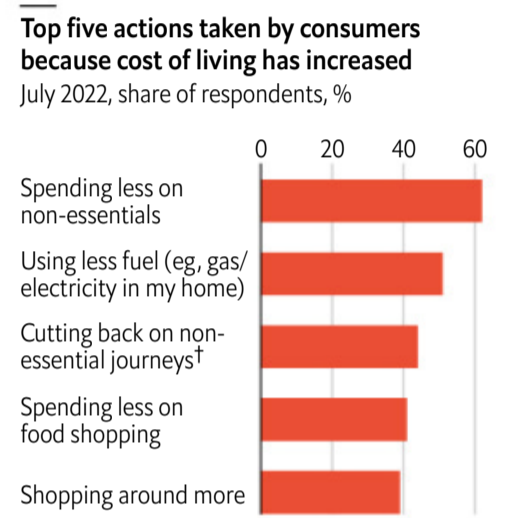
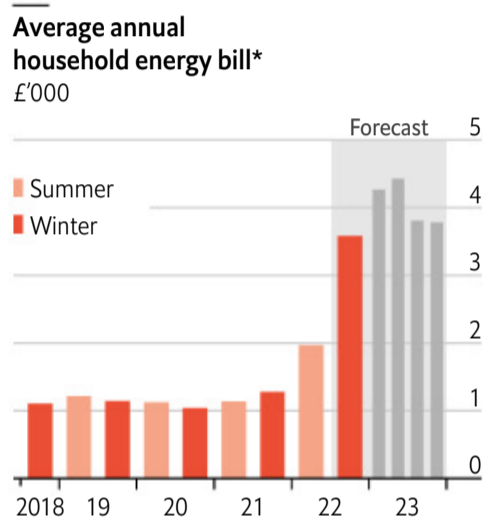
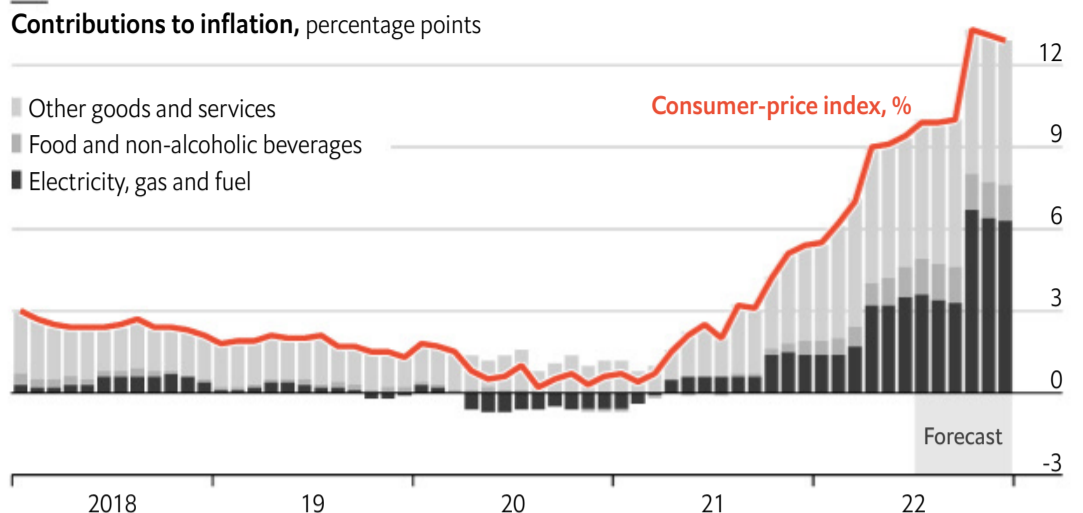
BRITAIN'S ECONOMY needs to become a lot more productive. But first it has to get through the winter. The big problem is the spiralling cost of living. Last week the Bank of England predicted that annual inflation would rise to just over 13% this October. At least half of this increase will be driven by steep rises in energy prices, owing mainly to the war in Ukraine. Estimates from Cornwall Insight, a consultancy, suggest that households' average annual energy bills could grow from £1,971 (\$2,380) now, already a hefty increase on the prior year, to an eye-watering £4,427 in April.

Analysis by the IMF suggests that Britain's poor are particularly exposed to this price shock, because they tend to spend a bigger share of their budget on energy than the rich. The question of how to protect the poorest households from the energy crunch is dominating the race between Rishi Sunak and Liz Truss to become the next leader of the Conservative Party. But the squeeze is affecting more than the most vulnerable. Of the 89% of adults reporting that their cost of living has increased, 62% say they are already spending less on non-essentials and over half are cutting back on their home-energy use.

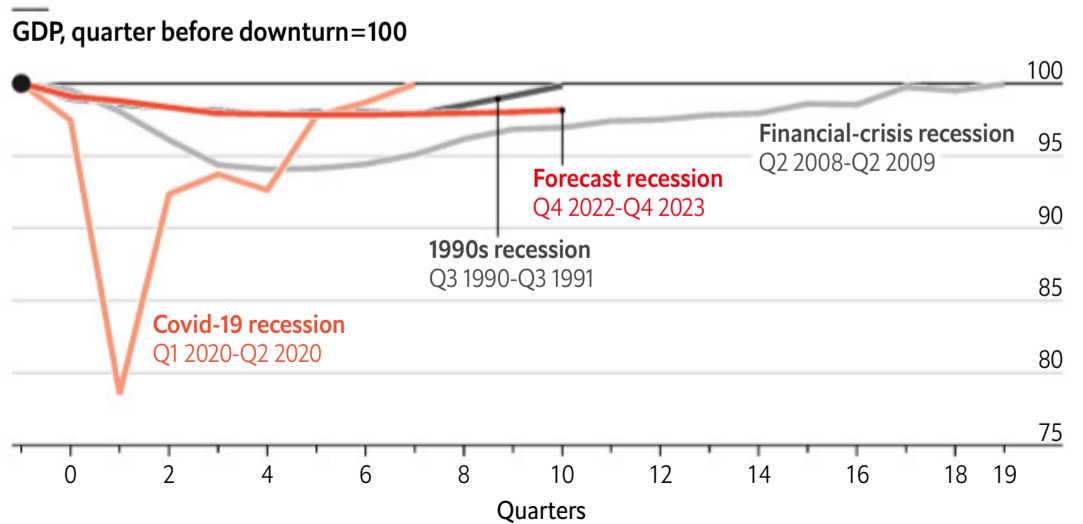
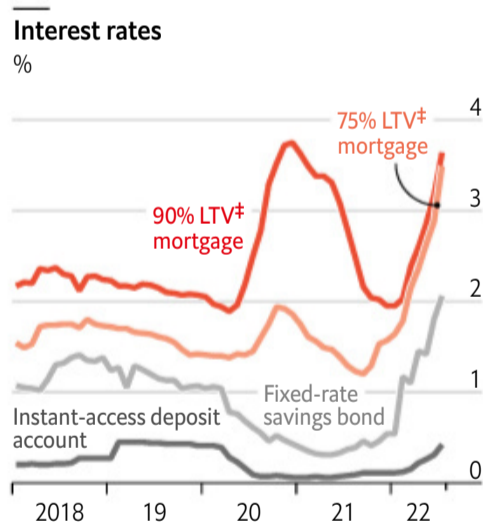
As Britain's politicians squabble over how and who to help, the Bank of England is acting to ensure today's high inflation rate does not become embedded in the system. It raised interest rates by half a percentage point on August 4th, the largest increase for 27 years and the sixth rise in a row. That is pushing up the price of mortgages and, not quite as quickly, the return to savings (see Bagehot).

The bank is predicting that households will suffer their biggest drop in living standards in decades: next year post-tax labour income is expected to fall in real terms by an annual rate of over 4%. It also forecasts a protracted recession. The coming downturn will be shallower than those prompted by the global financial crisis and the pandemic, but bodes ill for Britain's ability to break out of its longer-term economic rut. Recessions are bad for investment, and the cost-of-living crisis will dominate the government's agenda for months. How political energy is used matters, too. ■

## → In Britain the cost of living is increasing, driven by rising energy prices



## → Rising prices and interest rates will hurt real incomes and usher in recession



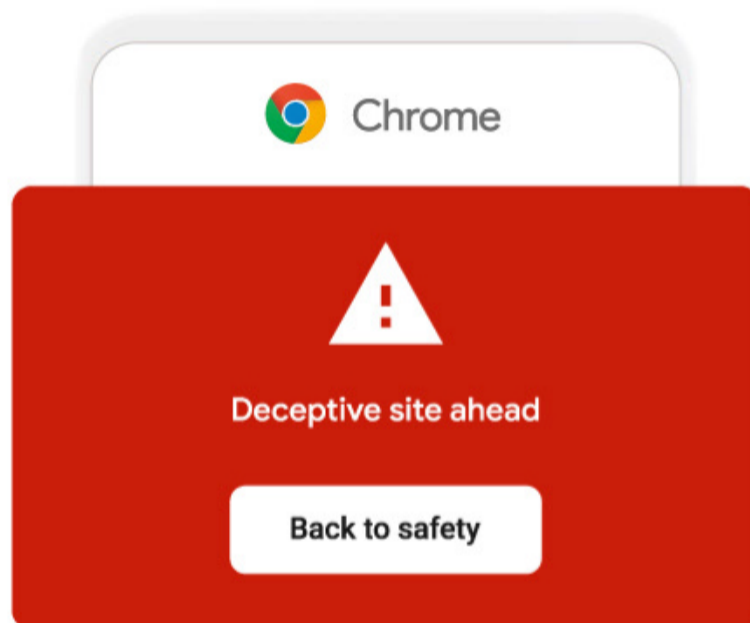
\*Capped default tariff rate, based on national average usage, including VAT †In vehicle ‡Loan-to-value Sources: Bank of England; Ofgem; Cornwall Insight; ONS





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# Bagehot | Live by the bank, die by the bank

*Rising interest rates will split the Conservatives' electoral coalition*



**B**ASHING THE Bank of England is in vogue in Conservative circles. Even during good times, it personifies things the Conservative Party does not like: it is technocratic (boo!), unelected (shame!) and based in London (hiss!). Now that it has presided over a surge in inflation, expected to peak at 13% later this year, Conservative MPs are queuing up to kick it. Liz Truss, the foreign secretary and odds-on favourite to become the next prime minister, has suggested tightening its mandate. Kwasi Kwarteng, potentially the next chancellor, said: “Clearly something’s gone wrong.” Suella Braverman, the attorney-general, happily trampled on the bank’s independence and said it should have raised interest rates a “long time ago”. Rather than burying the bank, they should be praising it. Without it the Conservatives would not be in power.

To misquote Milton Friedman, Conservatism is always and everywhere a monetary phenomenon. Margaret Thatcher won her mandate with a pledge to control inflation, breaking the hold of trade unions on British society as a consequence of that initial aim. John Major lost his authority when he, in effect, lost control of monetary policy on “Black Wednesday” in 1992, as Britain stumbled out of the Exchange Rate Mechanism. And monetary policy—specifically, historically low interest rates—has been at the heart of the Conservatives’ current string of four election victories.

Since 2010 a combination of tight fiscal policy (for everyone bar pensioners) and loose monetary policy has created an effective electoral coalition. Older voters, who overwhelmingly vote Conservative, avoided the worst of austerity. Pensioners were protected by a “triple-lock” rule that kept the state pension rising inexorably, regardless of the wider economy or the state of government finances. The National Health Service, the public service that older people use most, was ring-fenced. Boomers, the Conservative Party’s base, could still rely on the state. But younger Tory voters—the crucial marginal voters—could rely on the Bank of England.

Low interest rates, partly pushed down by global forces, changed Britain’s political landscape. To see how, head to the country’s new-build suburbs, filled with boxy, orange Barratt homes, that fringe towns across the “red wall” seats of northern England. It was voters in Barratt Britain, as *The Economist* dubbed it last year, that gave the Conservatives their majority. In the north,

low rates meant cheap mortgages. Fancy cars became affordable. Mondeo Man now drives an Audi: registrations of the sleek Audi A4 overtook the mid-market Ford Mondeo in 2019. It is hard to feel poor when perched on heated leather seats. People voted Tory not because they had become rich but because a Tory life, with a big Barratt home and a big German car, had become cheap.

That solves a conundrum which has befuddled Labour since 2010. For years Labour pointed to various measures of misery increasing under the Conservatives. Income growth was lousy; wages are still, in real terms, below where they were in 2008. Working-age benefits were sliced to bits. Local services were butchered. Yet the Conservatives increased their vote share at every election between 2010 and 2019. There is a simple explanation: for swing voters, things felt fine, largely owing to the central bank.

This arrangement has now come to a halt. The Conservative government still goes out of its way to protect pensioners. But higher interest rates threaten the Tory lifestyle of their marginal voters. Mortgages will become less affordable. Someone renewing a £200,000 (\$244,000) mortgage today faces paying more than £2,400 extra a year. This is the same amount as the energy-price increases that have prompted Martin Lewis, a consumer-finance deity, to warn of civil strife unless the government steps in.

The timing of rate hikes is awkward, too. Barratt Britain will not feel the pain instantly. Many mortgage-holders (four out of five by value) have a fixed-rate deal. But over half of them have to renew those deals before 2025, according to the central bank. With an election due by January of that year at the latest, many voters will be crossing ballot papers fresh from changing to new mortgage deals that make them thousands of pounds worse off. As for leasing a new car, higher costs mean the marginal Tory voter may well be squeezing into a second-hand Skoda, the Audi a memory.

In the campaign to be Conservative leader, Ms Truss has, in effect, called on the bank to be the bad cop. Patrick Minford, an economist of whom Ms Truss is a fan, has suggested that interest rates would have to rise to nearly 7% to control inflation if Ms Truss’s proposed tax cuts go ahead. Rishi Sunak, her opponent, argues that higher interest rates mean harder times for the Conservatives’ most vital voters: Mr Sunak’s campaign launched a calculator, pointing out how much extra voters would have to pay on a mortgage. Sound money is not always sound politics.

## Bank you very much

Optimistic Conservative strategists know that their core voters are unaffected by higher interest rates. The number of outright homeowners in Britain overtook that of mortgage-holders in 2014, and their number has continued to rise. The past decade has been one of cheap debt but lousy returns for savers, which was bad for retirees, who back the Conservatives by two-to-one. For the party’s base, higher interest rates are an irrelevance or a boon.

But beyond this cohort, things are less pretty. In Barratt Britain higher interest rates will bring a financial reckoning. Losing marginal voters is the quickest way to lose an election. In a first-past-the-post voting system, the difference between clownish failure and once-in-a-generation success are slim. Theresa May, who is regarded as a cack-handed election-fumbler, won only 300,000 fewer voters than Boris Johnson, who enjoys an undeserved reputation as a uniquely popular leader. Maintaining the coalition that handed Mr Johnson power is a delicate task. Rising interest rates make it a near-impossible one. The Conservatives owe their rule to the Bank of England. They will owe their demise to it, too. ■



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### Russia's exiles

## The best and the brightest

TBILISI AND TEL AVIV

**Much of Russia's intellectual elite has gone into exile. That will have dramatic consequences for both Russia and the exiles themselves**

ON A RECENT warm and breezy Saturday night a few dozen Russians—mostly in their 20s and 30s—crammed into a small Soviet-era apartment in Vakke, a well-wheeled part of Tbilisi, Georgia's capital and, for now at least, their new home. While thousands of their compatriots were enjoying Georgian food and wine in street cafés and Russian-speaking bars, they huddled around a projector, holding what they described as a “home conference”.

Émigré hangouts can be depressing places. This one exuded intellectual energy. The event was well structured, attendees were well behaved, and there was almost no drinking. Over the course of two hours a dozen speakers talked about their past and present pursuits. Their subjects ranged from the “pathology of propaganda” and cleaning up the streets of Tbilisi to recycling, driverless cars and helping people with psychological trauma. In the interval, they sampled home-made snacks, including vegan, gluten-free cake (5 lari—\$1.85—a piece). In both form and content, the conference was a snapshot of a country that the attendees wished to live in, and

which was now separate from the place they once called home.

Nobody knows exactly how many people have left Russia since the start of the war. Estimates vary from 150,000 to 300,000. About 50,000 are thought to have settled in Georgia, an influx large and sudden enough to push up local rents. It is not just the numbers that matter, but who the émigrés are. Like those crammed into the Vakke apartment, the diaspora consists largely of young, well-educated, politically conscious, active, articulate and resourceful people—in other words, Russia's intellectual elite. The exiles have taken with them their habits, their networks, their ability to self-organise and their values. That will have profound effects on both the country they have left behind and the countries they have settled in.

Georgia, a former Russian colony and Soviet republic, has itself been on the receiving end of Russian aggression, most recently in 2008. These days around 20% of its territory is in the hands of Russian-backed separatists. Now the country is providing refuge to activists and journalists.

Many are too young to remember Mr Putin's war against Georgia. But they share the sentiment expressed on graffiti around Tbilisi: “Fuck Putin's Russia”. Much of their energy and drive is being spent trying to ameliorate the impact of Mr Putin's war against Ukraine.

Tickets to the Vakke conference cost 20 lari. Along with the cake money, the cash went to Emigration for Action, a charity that provides medication for Ukrainian refugees. Ekaterina Kiltau, one of its founders, was the final speaker. “We have come to Georgia, and we have the privilege to do and say what we want, to call the war a war [the word is banned in Russia] and to help Ukrainians,” she told the audience.

Other volunteer projects such as “Helping to Leave” and “Motskhaleba” (which means “mercy” in Georgian) grew out of chat groups on social media. Now they involve hundreds of volunteers helping thousands of Ukrainian refugees escape from the war. Larisa Melnikova, one of Motskhaleba's co-founders, is a digital designer and a business consultant who used to work for the Russian branch of Boston Consulting Group, an American multinational. She has now turned her skills to writing an internet bot that helps human volunteers sort through requests for help. “I know that if I don't do anything, I will be in greater pain,” she says. “I never voted for Putin, but I paid taxes in Russia and I bear responsibility for its actions.”

Back in Russia civic activists such as Ms Kiltau and Ms Melnikova helped monitor ►►

elections, volunteered for independent candidates and helped OVD-Info, a human-rights organisation that assists the victims of Russian state repression. Had they stayed in Russia and publicly protested against the war, they would most likely be in prison. That is what happened to Alexei Gorinov, a Moscow city council deputy sentenced to seven years in jail for criticising the war, and who rejected the idea of holding a children's drawing competition while it was happening. "These people are heroes, but I feel I am more useful here," says Ms Kiltau.

Working as a volunteer in Georgia, she says, is not just about helping Ukrainians but also about preserving their own sense of honour and sanity. "Pain, shame and responsibility" are three emotions that Ms Kiltau feels constantly. Her pain is acute: Rubtsovsk, the small town in Siberia from which she hails, and which was once surrounded by five gulag camps, became notorious as one of the top destinations for parcels sent home by Russian soldiers looting civilian property in Ukraine.

### Echoes of history

Like most Russian exiles in Tbilisi, those who gathered in the Vakke "home conference" fled Russia in the first two weeks of the war. They fled because they were afraid, and because they felt stifled by life under a regime that brooks no dissent. Spontaneous and emotional as their exit seemed to them, it was also part of a Kremlin "special operation". By spreading rumours of imminent arrest or conscription, and sending thugs to harass activists and journalists, it drove those who publicly opposed the war out of the country.

Some were relocated by the firms they worked for. Others went under their own steam. A survey of recent émigrés showed that about a quarter of those who left settled in Georgia. The same number went to Istanbul, and another 15% ended up in Armenia. (These places do not require visas for Russian citizens.) Nearly half of those who left work in computing and IT, according to a survey carried out in March. Another 16% were senior managers; 16% more worked in the arts and culture. Only 1.5% of emigrants ever supported Mr Putin's United Russia party.

Today's exiles are not the first Russians to flee abroad in the face of repressive rulers. A hundred years ago, during the Russian revolution, many aristocrats, soldiers in the anti-communist White Army, and members of the intelligentsia fled the Bolsheviks, who plunged Russia into a civil war after they seized power. Like their successors a century later, they made their way to Tiflis and Constantinople (modern-day Tbilisi and Istanbul).

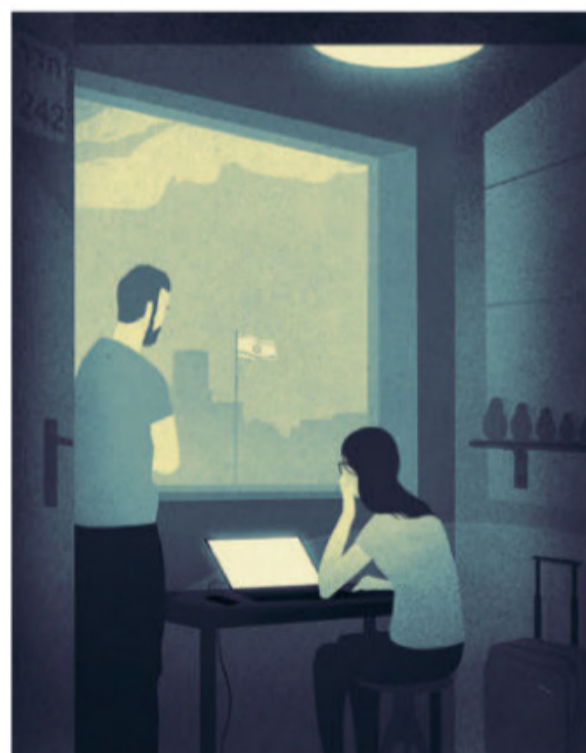
Although today's Russia is not embroiled in civil war, its invasion of Ukraine

has cut through families. Arguments have split brothers from sisters and children from parents. (Such torn ties are the subject of a documentary by Andrei Loshak, a Russian film-maker who is among those to have moved to Georgia). Lately a barely detectable, but nevertheless real, tension is rising between those who left Russia and those who stayed, however similar their attitudes to the war. Behind the veneer of composure and energy among émigrés lies the pain of broken lives, a fractured country and homes left in a hurry.

The effects of the latest wave of emigration on Russia's future is likely to be far greater than the mere numbers suggest. Andrei Zorin, a cultural historian at Oxford University, points out that the loss of the Westernised elite after the Bolshevik revolution in 1917 was ameliorated partly by the rise of bright children from the Russian peasantry, who were eager for education, and whom the new Communist authorities were eager to help.

They were joined by ethnic minority groups within the Soviet Union—Jews from the shtetls, Armenians, Georgians and people from the Baltic states, where literacy levels were highest. The reconstituted intelligentsia—which was dependent on the Communist Party, but often also critical of it—was essential to the state's ability to develop technology, science and culture. In the 1980s it formed the social basis of Mikhail Gorbachev's liberalising reforms.

These days, things are different. Having rejected modernisation in favour of traditionalism, imperial nationalism and war, the state ejected Europeanised Russians as superfluous, alien and dangerous. Today's kleptocratic system squashes social mobility and holds little promise of progress. The departure of the educated class today could end a modernising trend that began in the 18th century, says Mr Zorin.



For many years after the fall of communism the modernising elite and the Russian state managed an uneasy cohabitation. In the 1990s and early 2000s the children of the Soviet intelligentsia rejected their parents' beliefs, mocked anything Soviet and embraced capitalism as they understood it. They did not touch the foundations of the state, but they made Russia more liveable and attractive. They began to transform Moscow into a comfortable European capital, with cycle lanes and trendy art galleries and a quick food-delivery service called Yandex.Lavka—a subsidiary of Yandex, a home-grown tech giant.

Ilya Oskolkov-Tsentsiper is a media manager in his 50s who championed many of Russia's most successful urbanist projects, including Afisha, one of Moscow's first entertainment-listing magazines. Sitting in a café in Tel Aviv, his new home, he says the transformation began as an aesthetic endeavour. "We imagined and described Moscow not as a depressing and criminalised city with social problems and inequality, but as a bohemian European capital. The project was so successful that we started to believe [the change] was for real," he says.

Over the past decade or so those decorations became increasingly backed by substance. Younger, engaged Russians created cultural institutions and launched volunteer projects independent of the state. They helped children with autism, opened shelters for the homeless, recorded podcasts about Russian literature and occasionally came out on protest marches. A survey of exiles conducted in March showed that 90% are interested in politics and 70% have donated money to non-government organisations and opposition-friendly media.

"We believed that our habits and our social practices would make the country humane; that our small deeds would have an effect," says Sofia Khananishvili, a 23-year-old university graduate who used to teach literature at a school in Moscow. These days she works in a bookshop in Tbilisi called Dissident Books which she and her friends have opened. Among its titles is a volume called "Youth in the City: Cultures, Stages and Solidarities".

Ms Khananishvili and her contemporaries were never in charge of the state, but they managed to co-exist with it. "We did not touch them and they did not touch us," says one of her friends, an IT specialist. They lived in the folds of the empire, benefiting from Russia's oil-driven economy but trying to build their own lives apart from a state that was growing increasingly militaristic and repressive.

Few people tell the story of the relationship between the modernising class and the state as well as Ilya Krasilshchik, a media manager, and his girlfriend, Sonia Ar-



shinova. At 35 Mr Krasilshchik had already been the youngest editor-in-chief at Afisha magazine; the publisher of Meduza, an independent online outlet based in Latvia; and more recently an executive at Yandex.Lavka, the food-delivery company. He started getting warnings about the war from inside Yandex back in November. The day after it started he met up with Ms Arshinova in a coffee shop in Moscow. “Everyone was talking about evacuation, looking up flights,” she recalls.

Ms Arshinova, who is 26, was a programme director at Strelka, Moscow’s flagship design and architecture institute. (Its rooftop bar was once a haunt of the beautiful and the well-connected.) When the war against Ukraine began she was working on bringing foreign experts to give lectures to a Russian audience on urban design. They never came. That day, she recalls, “The bubble burst and the shit was dripping down our eyes. We were behind the enemy lines and the enemy was our own city and our own country. We capitulated.”

A few weeks after they moved to Tbilisi, Russian authorities opened a criminal case against Mr Krasilshchik. An Instagram post about Russian atrocities in Bucha, a city in northern Ukraine, was enough to attract charges of “discrediting Russia’s armed forces”. These days Mr Krasilshchik scoots around Tbilisi on his red scooter, recording podcasts and running a new start-up, a half media and half support group called “Helpdesk Media”. It grew out of his Instagram account, which has 150,000 followers, and has the consumer-friendly interface of a Yandex service.

Instead of fast food, it delivers advice to people who need logistical, psychological or legal help. It also tells the stories of people affected by the war: the dead, the wounded, the refugees and the émigrés. “Our focus is men and women at the time of war whose lives have been uprooted and

destroyed whoever they are,” he explains.

Most émigrés recognise that they are both lucky and privileged to have been in a position to leave. Many see their situation as temporary, and continue to support themselves by renting out their apartments in Russia. (By May, flows of money from Russia to Georgia had risen tenfold.)

Some of those who fled in the first weeks of the war, and who are not under an immediate threat of being arrested, have even been back to Russia temporarily, to see their parents or take care of personal affairs. “It is the strangest feeling. You go back and everything looks exactly the same—the same dentist, the same shops, the same restaurants—but everything has changed,” says Lika Kremer, a Russian podcast producer. The façade of a well-heeled European city is still there. But it has been hollowed out.

It is the silence and the absence of any overt sign of war that is most unbearable, says Ms Kremer. Unlike Ukraine’s refugees, many of whom choose to return to their homes as soon as they consider it at least somewhat safe, many of Russia’s exiles feel they have no country to go back to, and struggle to define what “Russia” actually means. “We have our identity, and our social connections, but no country of our own,” says Ilya Venyavkin, a historian.

#### Next year in Moscow

The war, and physical separation from Russia, have inspired the idea of a different Russian nation, one that does not depend on an imperial identity, or even on geography. The first step for those pursuing that idea, argues Andrei Babitsky, a journalist who spends ten hours a week learning to read and write in Georgian, is to rid themselves of imperial arrogance. “I share this arrogance. Even today...I cannot stop thinking of the Russian language and Russian culture. My culture. I would gladly

give it away entirely for a real peace, but I still cannot help thinking how my language is going to be alive after so many people have been killed in its name,” he wrote in a recent column.

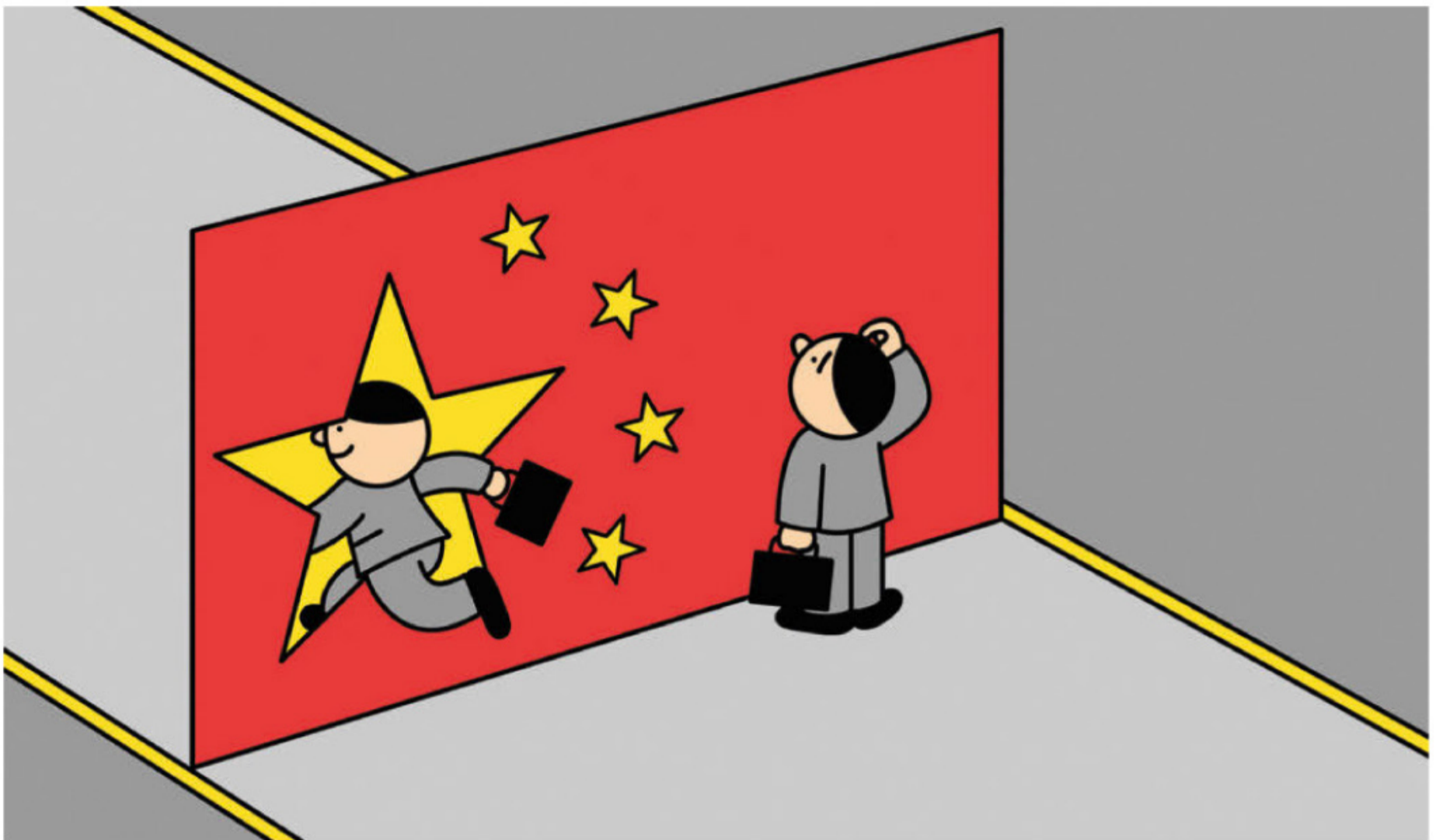
Some exiles talk about creating a virtual state, where social structures can be built independently of any form of government or even geographical location. “Russia is not about longitude and latitude. The Russian diaspora is intellectually strong, motivated and emotionally charged, so it will undoubtedly survive,” says Phillip Dziadko, an author and publisher. “And we have learned to live without the state.”

Their hope is that the internet, and their own energy, will allow them to retain their presence in the same information space as their peers who stayed behind. For now at least, there are still holes in Russia’s regime of online censorship. YouTube is still available. VPN software, which can mask the websites a user is looking at, gives the tech-savvy access to the outside world. Independent media organisations such as Meduza and TV Rain have decamped to Riga, the capital of Latvia, and shifted their operations online.

Shimon Levin, an Israeli rabbi who was born and bred in Russia, who grew up with Russian literature and spent years serving the Jewish community, sees parallels between such thinking and the experience of the Jews, who managed to keep a distinct culture alive for thousands of years. The reasons Jews succeeded in keeping their identity, he explains, was that they put intellectual freedom and books, not land, at the centre of their national consciousness.

“Geography is an important marker of national identity, but identity is dynamic and can only thrive if it gets enriched by new meanings,” he continues. “If the Russian intellectual elite manages to develop its non-imperial identity and to focus on how to live in a new reality and what the “wonderful Russia of the future” [a term coined by Alexei Navalny, Russia’s opposition leader] should look like, it might at least partially compensate for the loss of their motherland.”

The current wave of emigration has a slogan—*Poka Putin Zhiv*, or “While Putin is Alive”. Nobody knows how long that will be, though time is certainly on the émigrés’ side. Most are in their 20s and 30s; Mr Putin turns 70 later this year. But despite their optimism, it is not certain that they will ever go back. It is even less certain what Russia will look like when the war ends. “The ongoing exodus of Russia’s educated Westernised class could be Russia’s last wave of emigration,” Mr Zorin says gloomily, “since there are no ways of reproducing that elite.” Mr Dziadko, a former student, prefers not to think too far ahead. “We don’t know where we are going to land,” he says. “Because we are still in flight.” ■



## Private enterprise

## China's new tycoons

SHANGHAI

## Who is winning in Xi's economy?

XI JINPING HAS a master plan for China. Its ultimate goal is for the country to be the 21st century's dominant superpower, both feared and admired. China's increasing sabre-rattling encapsulates the desire to be fearsome (see next article). As for admiration, that is to come from growing economic and technological heft. Here, Mr Xi's plan involves a reshaping of Chinese private enterprise.

At first blush, this exercise has been painful for business. A crackdown against successful internet companies has wiped as much as \$2trn from their collective market capitalisation. On August 4th Alibaba, an e-commerce giant, reported its first ever quarterly decline in revenues. A day earlier its financial affiliate, Ant Group, revealed a slide in profits. Jack Ma, who co-founded both firms, may soon cede control of Ant. His net worth has fallen by more than \$20bn in the past couple of years. That of Hui Ka Yan, the founder of Evergrande, a troubled property giant, has crashed from \$40bn in 2020 to \$6bn. Last month Carlos Tavares, the boss of Stellan-

tis, a carmaker (whose largest shareholder, Exor, part-owns *The Economist's* parent company), said that it would exit a Chinese joint-venture after complaining of "growing political interference".

Yet if you look closer the picture is more complex. Even as some businesses suffer, others are thriving in Mr Xi's China. Companies have raised a record \$58bn in initial public offerings in mainland China so far this year, according to Bloomberg, a financial-information firm, compared with just \$19bn in America and \$5bn in Hong Kong. Another 1,000 firms are reportedly lining up to go public. A fresh cohort of tycoons is emerging, too. China's ten richest magnates have accumulated a net \$167bn in

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wealth since the start of 2020, according to data from Bloomberg. In the past few weeks *The Economist* has spoken to several of the new champions, and the mood is surprisingly upbeat.

This century China's private sector has grown from a backwater into one of the most dynamic in the world. According to the Peterson Institute for International Economics (PIIE), an American think-tank, by 2020 privately controlled companies accounted for more than half of the market capitalisation of China's 100 biggest listed firms, compared with less than a tenth a decade earlier. The private sector employs four in five urban workers, or around 150m all told. Thirty-two private Chinese companies feature in the *Fortune* 500 ranking of the world's biggest firms by revenue, up from none in 2005.

The march from Maoism to markets has been long and arduous. Until 1992 "entrepreneurs were looked down upon", recalls Zheng Chunying, back then a government functionary in Liaoning province. But China was buzzing with talk of change and its ailing leader, Deng Xiaoping, had just reaffirmed the government's commitment to economic reforms. Liaoning's local government began encouraging officials and Communist Party members to start their own firms. Mr Zheng became the proud co-owner, with his wife and sister, of a small shop that sold imported clothing from Hong Kong and shoes from Europe. When in 1996 officials were suddenly banned ▶▶

▶ from running businesses, he quit his government job rather than closing his shop.

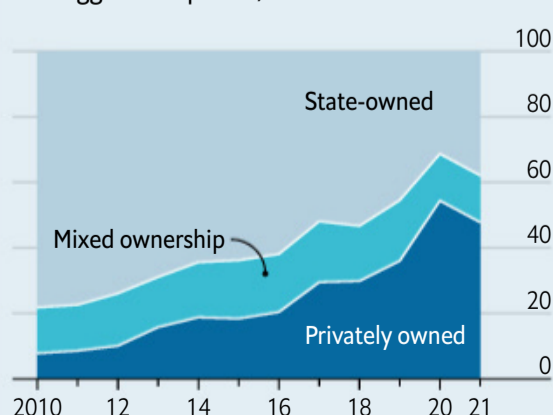
He was one of a cohort who chose business over bureaucracy. His decision was vindicated in 2002, when the party constitution was amended to let businesspeople become members. After that China Inc went from strength to strength. Entrepreneurs cite the first five years of Mr Xi's leadership between 2012 and 2017 as the heyday of private enterprise. Technology groups such as Alibaba and Tencent (see Schumpeter) and conglomerates like HNA and Dalian Wanda rose to global prominence. Their founders became household names—and amassed Croesus-like riches.

Five years ago the mood began to shift. First came a swift crackdown on the conglomerates, some of which subsequently went bust (for example, HNA) or were nationalised (Anbang, a big insurer). Then thousands of privately run shadow banks were shut down. In the past two years came the turn of the tech giants, slapped with regulatory probes, fines and tough new rules on everything from user data to the treatment of workers, and of property firms, whose ability to take on new debt began to be restricted by the government. Last year the private sector's share of the market value of China's 100 largest companies fell for the first time (see chart 1).

Look beyond tech and property, though, and things are rather different. Many big private companies “have not only avoided regulatory assault but have also grown bigger”, says Huang Tianlei of PIIIE. Anta has built a global sportswear empire. Batteries made by CATL can be found in many of the world's EVs. Zhifei Biological, a maker of covid-19 and other tests from the central city of Chongqing, has come out of nowhere to land on the *Fortune* 500 list. Mr Zheng's firm, Jala, now employs 8,000 people and is one of the largest domestic makers of skincare products. His firm has become an important part of a cosmetics development park called “Oriental Beauty Valley”, where local brands have been encouraged to set up labs and hire scientists.

### Private property

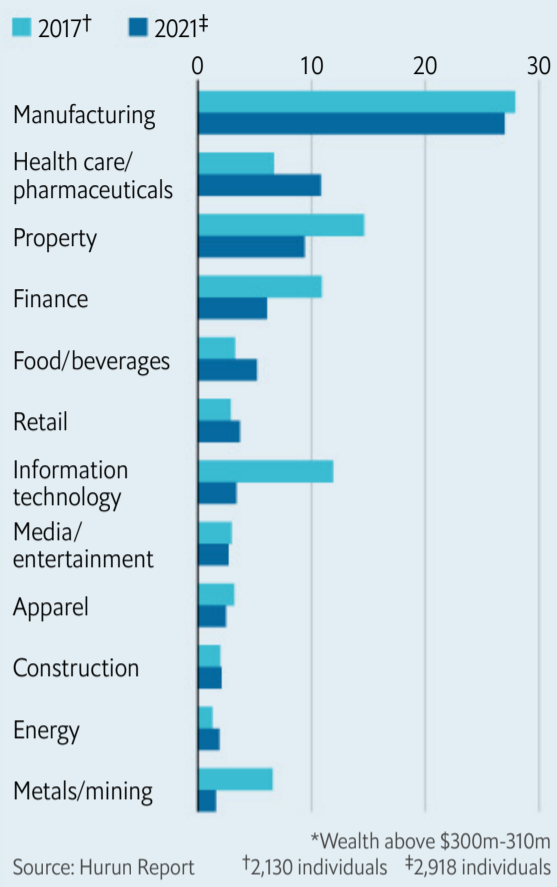
China, market capitalisation of 100 biggest companies, % of total



Source: Peterson Institute for International Economics

### For richer or poorer

Hurun China Rich List\*, people by selected industry, %



\*Wealth above \$300m-310m  
 †2,130 individuals ‡2,918 individuals

The bosses of these new corporate champions are dislodging tech moguls as owners of China's biggest fortunes, notes Rupert Hoogewerf of Hurun, a compiler of rich lists (see chart 2). China's wealthiest man is now Zhong Shanshan, who built Nongfu, which sells bottled water.

Many tycoons have greatly added to their personal wealth with direct help from local authorities. Take Muyuan, which has grown into one of the world's biggest hog producers. The Communist Party of Nanyang city, where the company is based, has an explicit goal of putting it on the *Fortune* 500 list. In late 2021 the local party told officials to make land available for Muyuan, and to streamline its various applications and inspections. The company is to receive subsidies for farm equipment, and local engineers and other workers are to be connected with the company, the plan ordains. The fortune of Muyuan's founder, Qin Yinglin, has swollen to \$23bn.

As for the next generation of entrepreneurs, Mr Xi recently urged them to “dare to start a business”. His message has been one of unwavering support for startups—as long as they focus on the areas the government has prioritised. These include cloud computing, green energy and high-end manufacturing. The central government wants to create 1m innovative small and medium-sized firms between 2021 and 2025. Of those, 100,000 will be dubbed “specialised new enterprises” and 10,000 will earn the distinction of “little giant”. The state still takes direct stakes in private companies. But it is finding new ways to

influence and guide the private sector, often through industrial parks and a system of state-designated status.

Firms are free not to participate, but many will find great benefits to becoming part of these ecosystems of talent, capital and market access. Designations such as “little giants” act as endorsements and signal where capital ought to flow. Such labels also make for “good public relations”, says Gu Jie, founder of Fourier, a robotics startup. Obtaining them eases access to places like Zhangjiang Robotics Valley in Shanghai, part of a larger high-tech development zone housing 150 research and development (R&D) centres, more than 24,000 companies and 400,000 workers. The local government owns and runs the zone.

Startups benefit in other ways. Mr Gu, whose firm is based in Zhangjiang, notes that securing the metal components for Fourier's prototypes takes weeks rather than months, because many of the suppliers themselves reside in the technology park. He has also been able to tap the local talent pool, hiring more than 600 engineers and scientists in the past few years. Doing that in Silicon Valley or other global tech hubs would be time-consuming and prohibitively expensive, Mr Gu observes.

Fourier has attracted money from SoftBank, a Japanese tech-investment group, and Aramco Ventures, the venture-capital arm of Saudi Arabia's oil colossus. It has also been backed by Chinese government funds. These state investments were smaller than SoftBank's. But they send a message to the market about Fourier's prospects. Such guidance funds, as they are called, are proliferating. Many are run by local governments. Other state entities have taken over the controlling rights to an average of 50 privately run listed firms each year over the past three years, up from six in 2017 and 18 in 2018, reckons Fitch, a rating agency (see chart 3 on next page).

### Forward, guidance funds

The recipients of such largesse do not see this as the first step to nationalisation. Zhou Hanyi, co-founder of Xinzailing, a company specialising in lift safety, likens it instead to a bank loan without a fixed maturity, which does not typically engender state meddling.

The state's goal in promoting guidance funds and schemes like “little giants” is to boost R&D and help train talent. If a particular company fails, its technology and workforce can be absorbed by others without too much waste, says Christopher Fong of Welkin Capital, a private-equity firm in Hong Kong (and investor in Xinzailing). Older businesses, too, are opting to join state-backed innovation parks. Mr Zheng, who built Jala with neither state help nor a party membership, has begun working with a district government in Shanghai. ▶▶



▶ All this hints that Mr Xi's ideal private sector might look something like Germany's *Mittelstand*, according to Enodo Economics, a research firm: "a large stable of small private firms that are innovative, generate high-paying jobs and produce technologically advanced manufactured goods". Some entrepreneurs say bureaucracy is being cut back in professionally managed industrial zones and that the state is meddling less in their operations. Yet there are reasons for scepticism.

In practical terms, Mr Xi's pursuit of higher-quality growth is easier in some parts of the country than in others. The startup zones in Shanghai are well-tuned machines with professional staff. Some employ former Wall Street bankers. By contrast, an analyst who recently visited an industrial park in the southern province of Hunan recounts that it resembled a film set made to look like Hangzhou, a big tech hub and home to Alibaba, without any real innovation taking place.

When startups soak up local-government largesse, moreover, they tie themselves to the fate and interests of local officials. This has always been a risk for companies but is becoming a more pressing concern as local authorities' involvement in business becomes closer. Last year the local government in Hangzhou conducted a sweeping review of the holdings of 25,000 officials and their family members. The city's party chief, believed to have links to Alibaba, was put under investigation and expelled from the party.

Mr Xi's vision faces another, more fundamental challenge. As a recent report from the Institute on Global Conflict and Co-operation, a think-tank at the University of California, San Diego, puts it, the idea is ultimately for private firms to "cluster and fill in the rest of the supply chain" around the state sector. In other words, rather than compete in a marketplace for customers who are themselves subject to competitive pressures, private companies are increasingly expected to cater, directly or indirectly, to the state itself. Some may

still try to dream up new products and services that appeal to a wide audience. But if more entrepreneurs find cosying up to government a surer road to commercial success, the private sector may lose some of its dynamism.

Deng and his successors understood the flaws of too much state control. Mr Xi seems intent on proving them wrong. As for the new tycoons, they will, like pragmatic bosses everywhere, adapt in order to prosper for as long as they can. ■

### Defence technology

## Can tech reshape the Pentagon?

PALO ALTO AND WASHINGTON, DC

### Silicon Valley gets back together with the military-industrial complex

SOON AFTER Nancy Pelosi, speaker of America's House of Representatives, left Taiwan on August 3rd, China launched a series of war games around the island, which it claims as its own. This was a furious response to Ms Pelosi's intentionally provocative act. It was also a dry run for a bid to reunify Taiwan with the mainland by force, which China does not rule out. Troubling, then, for Taiwan and its Western backers, that in American simulations of the conflict the Chinese side often prevails. One congressional report in 2018 warned that America could plausibly face a "decisive military defeat" against China in a battle over Taiwan.

China has since kept chipping away at American military superiority, including its technological edge. Pushing that edge is therefore a priority for the Department of Defence (DOD). And that would be easier if America's world-beating software developers worked more closely with its equally formidable armsmakers, thinks Michael Brown, who heads the department's Defence Innovation Unit. Katherine Boyle of Andreessen Horowitz, a venture-capital (vc) firm, observes that America's largest weapons manufacturers lack top-flight programmers. Silicon Valley has them in spades—but has also long displayed an aversion to battlefield technology.

Now geopolitical strife, from Chinese bellicosity to Russia's invasion of Ukraine, is suddenly making the defence sector look more moral in techies' eyes (see Bartleby). At the same time, technology is changing how wars are fought. And big tech and scrappy startups alike see the DOD's \$140bn annual procurement budget, plus American allies' smaller but cumulatively significant kitties, as ripe for eating into.

Giants from Amazon to Microsoft are pitching for DOD contracts. VC funding for

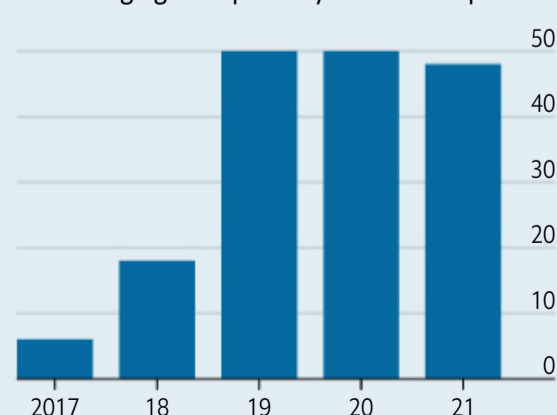
American aerospace and defence startups tripled between 2019 and 2021, to \$10bn (see chart). In the first half of 2022 such firms raised \$4bn, down a bit from the last six months of 2021 but not as sharply as for startups overall. On August 8th Palantir, a listed data-analytics firm which works with soldiers and spooks, reported better-than-expected second-quarter revenues of \$473m, up by 26% year on year. The estrangement between the crucible of America's tech and the Pentagon may, in other words, be coming to an end. The rekindled bonhomie may reshape America's mighty military-industrial complex.

The DOD played a large role in seeding Silicon Valley's early technologies, from radar to semiconductors. Lockheed once built missiles in Sunnyvale, wedged between Mountain View (now home to Google's parent company, Alphabet) and Cupertino (home to Apple). The Vietnam war changed all that. Anti-war sentiment permeated Stanford University's lecture halls and faculty lounges, and the garages of startup founders of the day. Protests against the conflict led Stanford to ban classified research and military recruitment on its campus in Palo Alto. In 2018 a protest by thousands of Google employees successfully stopped their employer from bidding for a Pentagon cloud-computing contract. The search giant's guidelines for its artificial-intelligence (AI) projects explicitly rule out weapons-related work.

Now two forces are pulling the Valley closer to the Pentagon. The first is the mounting geopolitical risk. Even before Russia's invasion of Ukraine reminded the West that big wars can still occur, a growing sense of insecurity was causing countries to beef up their defence budgets. Globally these exceeded \$2trn for the first time in 2021. Citigroup, a bank, reckons that 2% of GDP will go from being a largely ignored target for defence spending among NATO members to the alliance's floor. That would expand the worldwide market for tech firms dabbling in defence. Christian Brose, strategy chief of Anduril, ▶▶

### Own goals

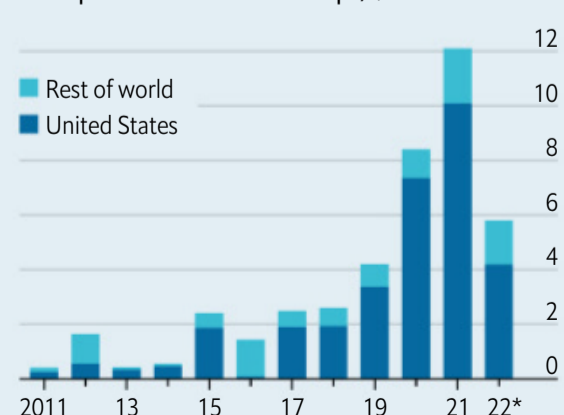
China, number of state-owned enterprises buying controlling rights in privately owned enterprises



Source: Fitch

### Boom!

Venture-capital investment into aerospace and defence startups, \$bn



Source: PitchBook

\*To July 1st



Armed and Skydioed

► which makes anti-drone and other defence systems, says his firm will look to America's allies to fuel growth. Since the start of the Ukraine war several European defence ministries have expressed interest in Palantir's data analytics.

The second force is technology. Advanced computing, and in particular AI, is finding its way into weapons and the command-and-control systems that connect them to one another. The Pentagon is therefore looking beyond its usual contractors to places like Silicon Valley, whose machine-learning chops put to shame the "primes", as defence giants such as Raytheon or Lockheed Martin are known. That is a big reason why Ash Carter, defence secretary under Barack Obama, created the Defence Innovation Unit in 2015. "Less of the tech the Pentagon needs is developed inside and more of it is becoming commercial and dual-use," explains Mr Brown.

Rather than buy isolated "platforms"—aircraft, tanks and other advanced systems—the DoD would like to build more networks of cheaper battle units. Last year Israel demonstrated how this might work by deploying swarms of connected drones in Gaza. The Pentagon hopes to do something similar through its Joint All-Domain Command and Control (JADC2) system, which enables data-sharing among sensors and battle units in real time. This has led to a shift in how the Pentagon views technology, says Raj Shah of Shield Capital, a military-focused VC firm. The future of warfighting is "software first", reckons Seth Robinson of Palantir.

This is good news for software pedlars. Big tech already equips the armed forces and law enforcement with cloud storage, databases, app support, admin tools and logistics. Now it is moving closer to the battlefield. Alphabet, Amazon, Microsoft

and Oracle are expected to divvy up the \$9bn five-year contract to operate the Pentagon's Joint Warfighting Cloud Capability (JWCC). Last year Microsoft was awarded a \$22bn contract to supply its HoloLens augmented-reality headset to simulate battles for army training for up to ten years. It is also helping develop the air force's battle-management system, which aims to integrate data sources from across the battlefield. In June Alphabet launched a new unit, Google Public Sector, which will compete for the DoD's battle-networks contracts. In a departure from Google's earlier wariness of the Pentagon, its cloud chief, Thomas Kurian, has insisted: "We wouldn't be working on a programme like JWCC purely to do back-office work."

Smaller firms, too, spy an opportunity. In January Anduril secured a contract to build anti-drone defences worth \$1bn over ten years. The following month another startup, Skydio, won one to sell the US Army \$100m-worth of drones. Palantir is one of several tech firms with contracts to flesh out the JADC2 vision. In July C3.ai, a software firm that went public in 2020, was picked by Raytheon to develop AI for a long-range precision-targeting system. Steve Walker, chief technology officer of Lockheed Martin, says that his company is also looking to work with such firms.

Tech's conquest of warfare is far from assured. The tech giants' earlier sorties into defence have a mixed record. Little appears to have come out of a big DoD programme from 2015, joined by Apple, to develop battle-ready wearables. The JWCC project was revived after an earlier version, called JEDI, was cancelled amid lawsuits from Amazon, which had lost the contract to Microsoft. The HoloLens deal has been plagued by delays and criticised as wasteful. Despite robust revenue growth, Palantir reported another loss last quarter, disappointing investors who were expecting the 18-year-old firm to make money at last. Its share price tumbled by more than 10%.

Among the upstarts, Anduril and Skydio remain exceptions in having won big contracts. Most smaller startups, says Ms Boyle, are "waiting to see if they are going to get a major contract". A fraction of the \$1trn that America has spent on defence procurement since 2016 has gone to non-conventional defence contractors. As that share rises, the primes, which retain a lot of power (and armies of lobbyists) in Washington, may become less welcoming of the newcomers.

Such obstacles may yet be overcome. That appears to be in the interests not just of the tech disrupters but of the Pentagon, too. In late 2020 America at last defeated China in one of the DoD's war games. The winning move was not more and better hardware. It was the roll-out of clever software-enabled systems like JADC2. ■

## Biotechnology

# More cash, stat!

**After a covid-fuelled adrenaline rush, biotech is crashing**

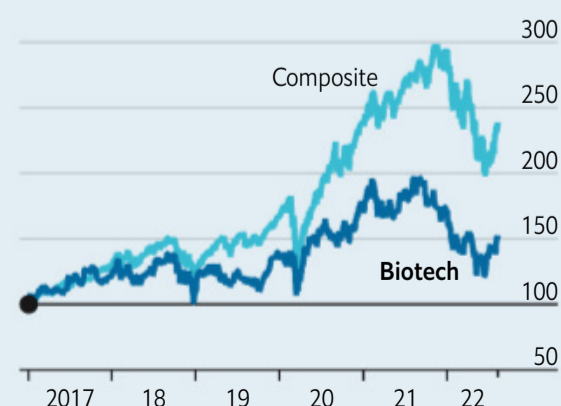
THREE YEARS ago no one had heard of BioNTech. Today the German biotechnology firm enjoys global renown, as well as annual revenues of \$19bn. The company owes both the lustre and the lucre chiefly to the successful mRNA covid-19 vaccine which it developed in partnership with Pfizer, an American drug giant. Yet even the effective jab has not immunised it from a downturn afflicting the biotech industry. On August 8th BioNTech reported that sales fell by 40% in the second quarter, year on year, as fewer people are left unjabbed and unboosted. Its share price tumbled by nearly 9%.

The biotech industry is particularly vulnerable to the syndrome of slowing economic growth, higher inflation and rising interest rates. As with other tech startups, rate rises make promised profits, most of which lie far in the future, look less hale today. Unlike software firms, biotech companies need constant injections of capital to develop their drugs, which takes lots of time and money.

Until recently that money was easy to tap. Biotech startups raised \$34bn globally last year, twice the figure in 2020. In the first six months of 2021, 61 such firms launched initial public offerings (IPOs) in America alone. Since then cash has grown scarcer. The first half of 2022 saw just 14 American IPOs. None of the 24 startups that Silicon Valley Bank, a lender to techie companies, expected to go public this year has made the jump. Funding for private biotech businesses is down, too. Banks are reluctant to lend to early-stage firms, whose fate is tied to treatments that might never materialise. ►►

### Adverse reaction

Nasdaq stockmarket indices  
January 1st 2017=100



Source: Refinitiv Datastream

▶ Many companies are shedding staff. This week Atara and MacroGenics, two medium-sized public firms, announced big layoffs. An index of biotech companies listed on New York's Nasdaq exchange has fallen by a quarter since its peak a year ago, further than the sliding NASDAQ index overall (see chart on previous page). Valuations of unlisted companies are dropping faster than ever, says Lain Anderson of L.E.K. Consulting. Not all will pull through.

As non-specialist investors swept up in the pandemic biotech boom retreat, more discerning ones are sharpening their pen-

cils. Some companies suddenly look cheap, especially those with proven treatments or drugs in late-stage trials. Venture-capital firms have raised over \$100bn to invest in life-sciences businesses in the past three years, notes Tim Haines of Abingworth, a biotech-focused asset manager. They still have plenty of unspent "dry powder" to deploy.

Big pharma in particular may be eyeing up biotech startups with promising drug pipelines. The giants will see some \$300bn-worth of patents expire by 2030, says Mr Haines. Pfizer has been particular-

ly acquisitive—and, thanks to the \$37bn it earned last year from sales of its covid vaccines and treatments, particularly flush. On August 8th it agreed to pay \$5.4bn for Global Blood Therapeutics, a maker of a treatment against sickle-cell disease, bringing its total takeovers to more than \$25bn in the past 12 months.

As for Pfizer's covid-vaccine partner, BioNTech, it is still worth five times what it was before the pandemic, despite a 50% crash in its market capitalisation since the peak a year ago. Don't bring out the defibrillator just yet. ■

## Bartleby Working for the baddies

*Why would anyone want to toil for a tobacco firm or a casino?*

"HAVE YOU looked at our caps recently?" is the question a worried Nazi soldier puts to his comrade in a comedy sketch performed by David Mitchell and Robert Webb. He has just noticed that their uniforms are emblazoned with skulls; a doubt is nagging away at him. "Hans," he asks. "Are we the baddies?"

No company employee has concerns of this sort. But some sectors are stigmatised enough to be known as "sin industries"—booze, gambling, tobacco and so on. Other industries have gone from being respectable to questionable: fossil-fuel firms, say. (A few, like cannabis firms, are travelling in the opposite direction.) Nationality now casts shadows in ways it did not before: working for a Chinese company might once have aroused admiration but now provokes suspicion. In an age when everyone is supposed to have a purpose, why would employees who have a choice work for the baddies?

The cynical answer would be pay. There is some evidence to suggest that executives in sin industries demand more money to compensate them for the stigma of working there. A paper in 2014 found that the bosses of alcohol, betting and tobacco firms earned a premium that could not be explained by those companies being more complex to run, less job security or poorer governance. The size of the premium did, however, line up with periods of heightened bad publicity, such as legal settlements in the tobacco industry. The stigma that wreathed these executives was observable in other ways, too: they sat on fewer boards than bosses in more virtuous industries.

Pay is a lever that might work for some positions and some people, but not for all of them. And it hardly satisfies as a psychological explanation. "Yes, I work

for a ghastly company but at least the pay is great," is not the kind of narrative that people like to fall asleep to. Thomas Roulet of Cambridge University's Judge Business School points out in "The Power of Being Divisive", a book about stigma in business, that employees of demonised firms are often proud to be on the payroll.

The most basic reason for that is a classic free-market narrative. If you believe in freedom of choice, and companies having the licence of society to operate, that is justification enough to work there. This may not seem especially purposeful: many employees would regard operating legally and serving customer needs as a requirement rather than a source of pride. But it is a perfectly coherent position.

Freedom of choice works less well as a rationale if the harm that products do, whether to lungs or to the environment, has been covered up, or if those products weaken consent by encouraging addiction. But firms under fire are practised at turning the negative effects of their products to their advantage. Energy firms argue that the money they make from oil

and gas today enables them to fund the transition to low-carbon energy tomorrow. Diageo, a drinks firm, highlights its programmes to encourage drinking in moderation. Tobacco firms peddle cigarettes even as they endeavour to soften the harm caused by smoking: British American Tobacco says that its purpose is to "build a better tomorrow by reducing the health impact of our business".

It is easy to scoff at this corporate cakeism. Easy, but unwise. First, hostility itself can sometimes act as a kind of binding agent for employees of stigmatised firms. A study by Mr Roulet found that job satisfaction increased at firms that faced disapproval, provided their employees regarded the criticism as illegitimate. Second, societies' attitudes can change, sometimes suddenly. The arms industry looks less evil now that its products are helping Ukrainians fend off Russia's tanks. Dependence on Russian gas has made secure sources of energy, even if they are not low-carbon, seem more attractive.

Third, employees in vilified industries are often in a position to do valuable things. Swapping from cigarettes to risk-reduction products is a net gain for people's health. Widespread suspicion of genetically engineered crops ignores the copious evidence that they are safe and useful. And a rapid decline in the number of new petroleum engineers in America will seem less desirable if a shortfall in expertise holds back carbon-sequestration projects.

There may be a cohort of evil employees who seek out demonised firms, steeping fingers, stroking cats and plotting ways to ruin lives. But the people who work in these industries are more likely to think of their work as important. They may not be wrong.



# Schumpeter | WeChat, they snoop, no one wins

*Tencent is a brilliant success story bedevilled by the splinternet*



EARLIER THIS year it suddenly became clear what a subversive force WeChat could become. It happened on April 22nd, when Shanghai was in lockdown. A black-and-white video swiftly went viral among the 1bn-plus Chinese users of the social-media platform owned by Tencent, China's biggest internet firm. For six minutes, as a camera panned over Shanghai's skyline, it carried an audio montage of babies crying after being separated from their quarantined parents, residents complaining of hunger, apartment dwellers banging bins, a mother desperately seeking medicine for her child. "The virus is not killing people, starvation is," a person cries out. It was a haunting, dystopian scene.

As Lulu Yilun Chen recounts in her book, "Influence Empire: The Story of Tencent and China's Tech Ambition", China's web censors swiftly blocked the video, though some netizens sought to defy them by posting it upside down. It was a rare moment when WeChat (*Weixin* within China) was used to express people's anger and pain, rather than the blander stuff—swanky dinners, clouds at dusk—that people usually post. WeChat is Tencent's flagship product, a "Swiss Army Knife" of a super app, offering messages, search, ride-hailing, food delivery and other applications on a single platform. But in a paranoid regime, its power is also a threat.

One can only imagine how much the episode must have unnerved executives at Tencent. Since early 2021 its value has plummeted by more than three-fifths, to \$365bn, amid a Communist Party crackdown on the consumer-tech industry. It is a firm that in many ways belies stereotypes about China and offers lessons to Silicon Valley. It eschews personality cults. It is obsessively innovative. It takes a radically decentralised view of investment. Yet in recent years, like other tech firms in China, it has been under pressure to bow to the whims of President Xi Jinping. That threatens its reputation in the West, where it is a huge investor in gaming (among other businesses) and where it is keen to expand its reach.

Tencent is not easy to chronicle. Other tech giants, including Alibaba, its Chinese nemesis, have been the subjects of riveting bestsellers. Before Ms Chen's book, Tencent's only corporate biography was an authorised one by Wu Xiaobo, a management scholar, published in Chinese in 2016. Mr Wu started by lamenting that he had failed to find the secret to Tencent's success despite

more than 60 interviews with senior executives. A big problem for any biographer is the firm's publicity-shy founder, Huateng "Pony" Ma. He is an erudite engineer who seems to hate the sound of his own voice. Ms Chen, a Bloomberg reporter who has covered China's tech firms for a decade, has spoken to him only once, as part of a gaggle of journalists in 2015.

As it turns out, Mr Ma's reticence is a source of strength, not weakness. What he lacks in outward charisma, he makes up for with steely resilience ("You either wait for someone to kill you or you kill yourself first," is how he describes the firm's constant efforts at reinvention). The lack of a domineering personality lets others thrive, for example Allen Zhang, creator of WeChat, who is equally shy, yet so competitive that he is a master gamer and champion golfer. Most important of all, keeping a low profile has kept Pony Ma personally out of the sort of political trouble Jack Ma (no relation), co-founder of Alibaba, has suffered—though it hasn't kept Tencent out of the government's line of fire.

Without rigid hierarchies, Tencent can let internal competition run amok, especially when it comes to creating innovative new products. In his book, Mr Wu describes this as "internal horse-racing" (as it happens, *ma* means "horse" in Chinese). He says almost all of Tencent's transformational ideas, including WeChat, came from second-tier teams competing against each other, not from the top brass. Like many Chinese businesses, Tencent has often been accused of plagiarism. But its *modus operandi* is to make swift, incremental innovations that create blockbusters.

Mr Ma's decentralised approach to the way Tencent deploys capital has been similarly astute. According to Ms Chen, the company has made some 800 investments globally. More than 120 of these have become "unicorns" worth more than \$1bn. It owns Riot Games, the franchise behind "League of Legends", and has big stakes in Epic, creator of "Fortnite", another gaming sensation, Meituan, a Chinese delivery app, Didi Global, a ride-hailing giant, as well as numerous other trailblazers such as Spotify and Tesla. It prides itself on taking a hands-off approach to its minority investments. As Ms Chen puts it, it has become an incubator of startups, not a killer of potential competitors.

In short, her book—and that of Mr Wu, which it draws upon—paints a picture of a company whose executives are fascinatingly idiosyncratic, and almost as obsessed with products and design as Steve Jobs, Apple's late co-founder. The trouble is that China's domestic politics and the messy Sino-American clash make it hard to feel confident about the future.

## The red Pony

The first problem is internal to China. Tencent is embedded in almost every aspect of life there. It makes money from app fees, traffic (via advertising) and transactions (such as selling virtual goods to gamers), as well as from cloud computing. This has overexposed it to the government's techlash. Mr Xi's crackdown on internet firms has hit its gaming arm, its fintech plans and local investments such as Didi. It has to censor itself vigorously.

It may hope that expansion abroad will help offset its problems in China. For example, it has plans for the global distribution of "Honor of Kings", whose popularity at home has already made it the biggest mobile game in the world. But the more it has to compromise with the Chinese government to remain safe, the more its products like WeChat, as well as its games, run the risk of arousing hostility from China hawks in America. As Sino-American tensions worsen, that is a game no one can win. ■



## The Gulf

# Funding which future?

DUBAI, MANAMA AND WASHINGTON, DC

### A vast oil windfall offers Gulf states one last chance to splurge

**I**N THE NORTH-WESTERN corner of Saudi Arabia, not far from the mouth of the Gulf of Aqaba, sits a patch of mostly bare desert—the ostensible location of Neom. This would-be city is intended to be a bold step into the future, and the showpiece of the kingdom's attempt to diversify its economy away from oil. There has been talk of robots doing menial work, beaches lined with crushed marble and fleets of drones forming an artificial moon. One recent whim is to create the world's longest buildings; like skyscrapers laid flat, these self-contained ecosystems would stretch for more than 100 miles. Estimates suggest the city could cost as much as \$500bn.

When this wild dream was first unveiled in 2017, financing it seemed near impossible. Now a torrent of oil money may allow Saudi Arabia to get things rolling. The world economy's recovery from covid-19, and Russia's invasion of Ukraine, have pushed up oil prices, triggering a staggering transfer of wealth from global consumers to fuel-exporting countries. From January to June, the price of a barrel of Brent crude rose from \$80 to more than \$120 (it is back below \$100 today). The IMF

estimates that energy exporters in the Middle East and Central Asia will this year net \$320bn more in oil revenues than it had previously expected, a figure equivalent to about 7% of their combined GDP. Over the next five years, the cumulative surplus could reach \$1.4trn.

Gulf leaders must now work out how to spend the proceeds of what could be the last big gush of oil wealth. Some promise to pay down debts and save for a post-petroleum future. Yet there will be pressure to share the bounty with the public—and few checks on those who wish to splash out on mega-projects or global influence. The impact in diplomatic circles is already visible.

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On a visit to Jeddah in July America's President Joe Biden bumped fists with Muhammad bin Salman, the Saudi crown prince. Mr Biden had until recently kept the prince at arm's length; the current political imperative to bring down petrol prices leaves little room for moral stances.

Expensive oil augments the financial power of the Gulf states at home and abroad, opening a gusher of public spending and steering flows of money around the world. The long rise in oil prices in the 2000s helped fuel huge global imbalances, depressed interest rates and attracted a stream of supplicants looking to curry favour. Cheap oil brings shrinking ambitions. When the last sustained period of high prices ended in 2014 it seemed as if the old social contract, which promised hefty subsidies and cushy lifetime gigs in the public sector, would have to change. There was talk of diversification, higher domestic fuel and food prices—even taxes.

A period of rock-bottom oil prices, and the hit from covid, saw fiscal positions deteriorate. This year's windfall offers an opportunity to strengthen them (see chart 1 on next page). Bahrain's public debt rose to 130% of GDP in 2020, but the country's budget is based on the assumption that oil will fetch a mere \$60 a barrel. High prices may allow it to reduce its debt ratio by about 12 percentage points this year, even though it is the smallest producer in the Gulf Co-operation Council (or GCC, a group that also comprises Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates). Oman's debt burden is projected to fall by more ▶▶

▶ than 20 percentage points of GDP.

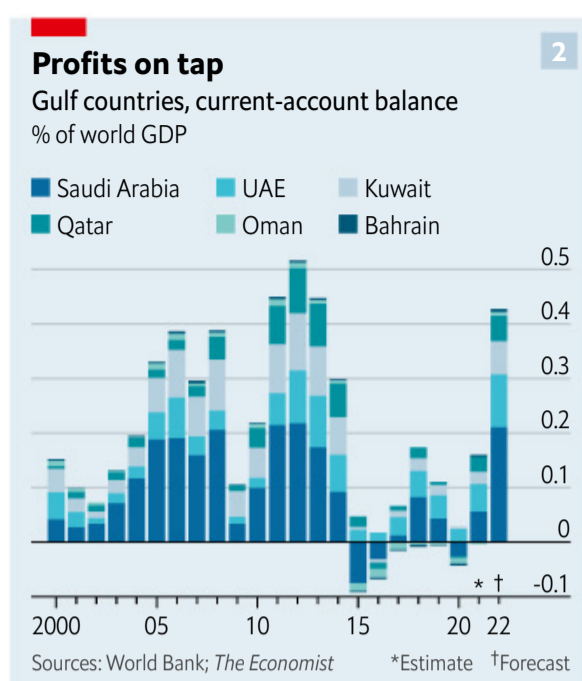
Other leaders aim to save much of their earnings. Mohammed al-Jadaan, the Saudi finance minister, says his government will not touch its oil bonanza, at least this year. It will put away the money at the central bank, then use it in 2023 to replenish foreign reserves or top up the Public Investment Fund (PIF), the sovereign-wealth fund that has become the kingdom's main driver of investment. Bahrain will use some of its surplus to refill a fund meant to provide for future generations, which it drained during the pandemic.

Yet the pressure to spend will be intense. Gulf economies have not been as squeezed by soaring prices as the rest of the world. The IMF expects inflation in the GCC to peak at 3.1% this year, well below levels in America and Europe. Abundant, cheap foreign labour keeps wage costs low. Most countries rely on fuel subsidies to limit inflation. A strong dollar, meanwhile, holds down the cost of imports (five of the six GCC members peg their currencies to the greenback).

### Under the pump

Residents in the Gulf are nonetheless feeling the pinch. The UAE phased out its fuel subsidies in 2015, and petrol prices climbed by 79% from January to July, when the government raised them once again, to 4.52 dirhams (\$1.23) a litre. That is not bad by global standards, but shockingly expensive for a rich petrostate—drivers in Saudi Arabia pay half as much. In July the UAE announced that it would almost double the welfare budget for poor citizens, from 2.7bn dirhams to 5bn. Eligible families will receive stipends for housing and education, plus an allowance to offset higher food and energy costs.

With just 1m citizens, representing 10% of the total population, the UAE can afford to splurge a bit. Satisfying the citizenry will be a bigger challenge in Saudi Arabia, where two-thirds of the population of 35m



are nationals. The Saudi government used past oil booms to offer more jobs and higher wages in the public sector. Doing so now would run counter to Vision 2030, an economic-diversification plan meant to shift the kingdom away from oil. Firms already grumble about how hard it is to retain talent. Many young Saudis see private-sector work as a fun distraction until a government job comes along.

Oil wealth offers other ways to shield citizens from cost pressures. In 2016 the Gulf states agreed to introduce a value-added-tax of 5%, and four have done so since (the laggards are Kuwait and Qatar). Saudi Arabia has gone much further. In 2020 it tripled VAT to 15%, hoping to offset the fiscal effects of the pandemic and low oil prices. “You have a policy tool you didn’t have before,” says Nasser Saidi, a Lebanese economist who runs an advisory firm in Dubai. “Rather than increase spending or hiring, you could lower VAT.”

Competing with such concerns is the need to think long-term: beyond the boom and, ultimately, beyond oil. At the modernist offices of Bahrain’s sovereign-wealth fund, such thoughts are sobering. “Of course we’re all happy the oil price is high, but the focus needs to stay on the non-oil economy,” says an executive. Working out what that means in practice is no easy task. Some sovereign-wealth managers in the Gulf say their mandates have become almost contradictory. They are meant to husband oil wealth for future generations, but are increasingly asked to deploy capital to fuel non-oil growth, a job that entails plenty of risk.

Gulf countries have not always done a good job of judging which risks to take. The region is littered with failed mega-projects from earlier booms. Saudi Arabia’s gleaming financial district, meant to compete with Dubai’s, was plagued by delays and cost overruns. When it was eventually finished, it sat empty: banks saw no reason to move. The UAE spent billions to create arti-

ficial islands shaped like a map of the world. More than a decade later, the archipelago is derelict. The UAE’s ambitious plans to become a semiconductor-manufacturing hub, and a centre for health tourism, have similarly fizzled out.

Wild flights of fancy like Neom stand ready to absorb a hefty chunk of the oil money this time round. Saudi Arabia also wants to host the Asian Winter Games in 2029, spraying desert mountains with snow; Dubai has a zany plan to create 40,000 jobs in the metaverse in five years. Even less ostentatious projects may prove wasteful. Saudi Arabia sees tourism as the centre of its post-oil economy, providing at least 10% of jobs and GDP. The oil boom will give the PIF billions to throw at resorts, amusement parks and other diversions. Yet Saudi officials cannot point to a proper assessment showing that its hoped-for 100m tourists will in fact choose to visit the kingdom each year. As Ali al-Salim, a Kuwaiti investor, notes: “It’s a pretty fickle business to be the linchpin of your economic plan.”

The Gulf states would be wise to focus on areas where they have clearer competitive advantages. Developing expertise in desalination techniques and technologies, much as Israel has done, could make a virtue of the region’s aridity. Investments in green-energy technologies like hydrogen could offer a source of revenues after the energy transition. Mr Saidi proposes investing in renewables projects and climate-mitigation strategies in Asia and Africa, as a green version of China’s Belt and Road Initiative. “This is a moment when you want to look again at how you provide foreign aid,” he argues.

### Tee off

Certainly, the boom stands to reshape the Gulf’s relations with the rest of the world—as demonstrated by Mr Biden’s trip to Jeddah. Enormous quantities of Saudi money are being spent to burnish the kingdom’s reputation in other contexts as well. The world of golf, for example, is being transformed as LIV Golf, a Saudi-backed rival to the PGA tour, lures stars with fantastical payouts. The country started hosting a Formula 1 race in 2021. Pop stars including Justin Bieber, Mariah Carey and David Guetta have recently performed in the kingdom.

The boom will also have less tangible international consequences. The GCC’s combined current-account surplus this year may run to more than \$400bn, or 0.4% of global GDP (see chart 2)—a slightly higher share of world output than the biggest surpluses achieved before the global financial crisis of 2007-09. In past booms oil profits have been recycled into investment flows back to America (through purchases of Treasuries, for instance), funding America’s current-account deficits. ▶▶



Yet America has become the world's largest producer of oil, and big emerging economies have grown richer and developed a thirst for the stuff. Thus the Gulf's surplus today is matched in part by weaker balance-of-payments positions in big emerging economies. That includes China and India, but also scores of smaller countries, including a few, like Sri Lanka, for which the surge in the cost of imported oil has been crippling. High oil prices have hit the world as a whole harder than they did in the 2000s. This is because they are largely the result of interruptions to supply, es-

pecially from Russia, rather than robust growth in global demand.

More than a few governments have already approached Gulf leaders for money—albeit to meet urgent obligations rather than to greenify their economies. Like China and India, Saudi Arabia and the UAE have played a growing role lending to poorer countries over the past two decades, taking over a position once reserved for advanced economies and multilateral institutions like the World Bank. The developing crisis across low- and middle-income economies could give Gulf states signifi-

cant leverage over less fortunate places, should they choose to wield it.

It may well be the last such opportunity. In poor countries and rich ones, the pain of soaring energy costs adds a new urgency to efforts to reduce dependence on fossil fuels. At the heart of the boom, the feeling is palpable. “There’s a ‘days-are-numbered’ kind of sentiment,” says Mr al-Salim, the Kuwaiti investor. “You look at the state Europe is in, I don’t think they’re going to allow themselves to be this vulnerable years from now.” Which raises a question. Will the Gulf? ■

## Buttonwood Recurring nightmares

*How should investors prepare for repeat inflation shocks?*

**B**UY STOCKS so you can dream, buy bonds so you can sleep—or so the saying goes. A wise investor will aim to maximise their returns relative to risk, defined as volatility in the rate of return, and therefore hold some investments that will do well in good times and some in bad. Stocks surge when the economy soars; bonds climb during a crisis. A mix of the two—often 60% stocks and 40% bonds—should help investors earn a nice return, without too much risk.

Such a mix has been a sensible strategy for much of the past two decades. Since 2000 the average correlation between American stocks and Treasuries has been staunchly negative, at -0.5. But the recent rout in both stock and bond prices has wrong-footed investors. In the first half of the year the S&P 500 shed 20.6% and an aggregate measure of the price of Treasuries lost 8.6%. Is this an aberration or the new normal?

The answer depends on whether higher inflation is here to stay. When economic growth drives asset prices, stocks and bonds diverge. When inflation drives them, stocks and bonds often move in tandem. On August 10th American inflation data showed prices did not rise in July. Stocks soared—the S&P 500 rose by 2.1%—and short-term Treasury prices climbed, too.

For as long as central bankers kept a lid on inflation, investors were protected. Yet look back before 2000, to a period when inflation was more common, and you see that stocks and bonds frequently moved in the same direction. AQR Capital Management, an investment firm, notes that in the 20th century the correlation between stocks and bonds was more often positive than negative.

Lots of hedge-fund types, pension-fund managers and private-equity bar-

ons are therefore worrying about the potential for repeat inflation shocks. Last year the debate in the halls of finance was about whether inflation would be “transitory” or “persistent”; this year it is about whether it is “cyclical” or “structural”.

At the heart of this is not whether central bankers can bring down prices, but whether the underlying inflation dynamic has changed. Those in the “structural” camp argue that the recent period of low inflation was an accident of history—helped by relatively calm energy markets, globalisation and Chinese demographics, which pushed down goods prices by lowering the cost of labour.

These tailwinds have turned. Covid-19 messed up supply chains; war and sabre-rattling are undermining globalisation. Manoj Pradhan, formerly of Morgan Stanley, points out that China’s working-age population has peaked. Jeremy Grantham, a bearish hedge-fund investor, fears that the switch to renewables will be slow and costly, and that lower investment in fossil-fuel production will make it hard for energy firms to ramp up supply, increas-

ing the risk of energy-price spikes. All this, the structuralists argue, means the current inflation shock is likely to be the first of many: central bankers will be playing whack-a-mole for a while yet.

Recurrent inflation would upend 20 years of portfolio-management strategy. If the correlation between stocks and bonds shifts from -0.5 to +0.5 the volatility of a “60/40” portfolio increases by around 20%. In a bid to avoid being wrong-footed once again, investors are updating their plans. As Barry Gill of UBS’s asset-management arm puts it, the task is “to realign your portfolio around this new reality”.

What assets will allow investors to sleep soundly in this new reality? Cryptocurrencies once looked like an interesting hedge, but this year they have fallen and risen in lockstep with stocks. A recent paper by KKR, a private asset-management firm, argues, perhaps unsurprisingly, that illiquid alternatives, like private equity and credit, are a good way to diversify. But that may be an illusion: illiquid assets are rarely marked-to-market, and are exposed to the same underlying economic forces as stocks and bonds.

There are other options. AQR suggests stock-picking strategies where success has little to do with broader economic conditions, such as “long-short” equity investing (going long on one firm and short on another). Meanwhile, commodities are the natural choice for those worried about a disorderly green transition, since a basket of them appears to be uncorrelated with stocks and bonds over long periods. In the search for new ways to minimise risk, investors dreaming of high returns will have to get creative. That, at least, should tire them out by the end of the day.



## America's economy

## Two cheers amid the fears

WASHINGTON, DC

## For a change, a downside inflation surprise and an upside jobs surprise

WHAT A DIFFERENCE a couple of data points make. Much of the recent talk about America's economy had focused on the possibility of stagflation, as GDP shrank and prices soared. Suddenly, though, things look rosier. First, on August 5th, statisticians reported that 530,000 jobs were created in the previous month—more than twice as many as expected. Then, on August 10th, they reported that consumer prices in July were the same as in June—the first absence of month-on-month inflation since early 2020. Could the doomsayers be wrong, and America really be about to enjoy both an economic boom and price stability?

Not so fast. It is foolish to rush to any conclusion based on a week's worth of data, especially amid the lingering covid-19 pandemic and war in Ukraine. Previous bursts of optimism have proved, unlike inflation, to be transitory. Moreover, a closer look at both reports gives as much reason for consternation as for celebration.

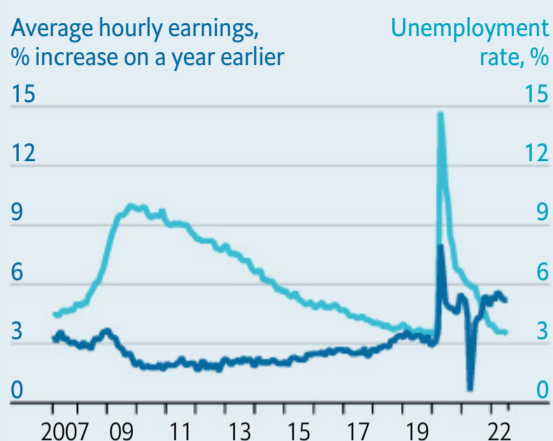
Start with the jobs figures. America's unemployment rate in July fell to 3.5%, matching a half-century low hit just before the pandemic. Normally that would have been greeted with unalloyed joy. But the ultra-strong labour market is a challenge for companies struggling to hire staff. Wages rose at an annual pace of 5.2% over the past three months, up from 4.7% in June. Meanwhile, the dominant factor in the drop in inflation was the recent fall in oil prices. Once volatile food and energy costs are stripped out, core inflation is still up by 5.9% compared with a year earlier.

Taken together, the data cast a fresh light on a debate that has raged among economists this year: just how big a trade-off the Federal Reserve faces between inflation and jobs as it tightens monetary policy. Jerome Powell, the Fed's chairman, has long insisted that present labour-market tightness may mean there is a path whereby companies can reduce their demand for new workers without large numbers ending up on the dole. In other words, the trade-off could be less severe than in previous periods of monetary tightening.

One way of understanding the debate is to consider the non-accelerating inflation rate of unemployment (NAIRU), also known as the natural rate of unemployment. It refers to the lowest level of unemployment that an economy can sustain before wage inflation starts to accelerate. Not

## How low can unemployment go?

United States



Sources: Bureau of Labour Statistics; Federal Reserve

directly observable, it is based on estimates. The concept of the NAIRU was once central to economic analysis and to the Fed's thinking about rates. But it fell out of favour before the pandemic when unemployment dipped below the assumed NAIRU range of 4-5.5% without any discernible pickup in inflation. In a strategic review published in 2020, the Fed indicated that the concept would no longer figure prominently in its policy decisions.

However, the surge in inflation over the past year, alongside the sharp drop in joblessness, has put the NAIRU back in the spotlight. There is a good case that it shifted markedly higher early in the pandemic. In mid-2020 unemployment soared to almost 15%. As Brandyn Bok and Nicolas Petrosky-Nadeau of the San Francisco Fed have noted, such a jump would normally have warranted a bigger slowdown in inflation than actually occurred.

The fact that there was no deflation implies that the natural rate of unemployment probably shifted higher. The researchers estimated that the NAIRU may have reached 8% in 2020, before edging down to 6% at the end of 2021. Now, the economy may be experiencing the flipside of an elevated NAIRU: higher-than-expected inflation as unemployment falls.

Structural changes in the economy during covid help explain why the natural rate of unemployment may have increased. From the boom in delivery and warehouse work to the subsequent recovery in restaurant and travel work, employers' staffing needs have evolved fast. Compounding that has been a change in what people expect from their jobs, epitomised by the shift to more remote working. One normal response from companies has been to offer higher wages.

A gap between the measured unemployment rate of 3.5% and the estimated natural rate of 6% implies that wage growth is likely to remain strong in the coming months. That will feed through into core inflation, even if oil prices continue to fall. A pessimistic interpretation is

that the Fed may have to keep raising rates until measured unemployment approaches the NAIRU. If so, millions of people would lose their jobs.

A more hopeful interpretation is that the gap may ultimately be closed more by the NAIRU itself falling rather than by unemployment rising. After the Fed's most recent rate rise in July, Mr Powell laid out this perspective: "Logically, if the pandemic and the disorder in the labour market caused the natural rate to move up, then as the labour market settles down, in principle you should see it move back down."

It is easy to see why the Fed no longer places the NAIRU on the pedestal that it once did. Not only is it invisible, it is also unstable, especially when the economy itself is in flux. Yet slippery as it is, it gets to the crux of today's concerns. Workers may rejoice at evidence of rapid job growth and wage increases. Only when these occur alongside a continued deceleration of inflation will economists' consternation give way to true celebration. ■

## The winter ahead

## Putin's present

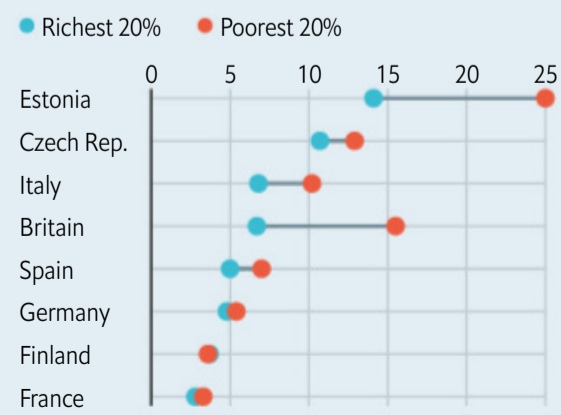
## Which European countries are most vulnerable to surging energy prices?

EUROPE IS FACING an enormous energy-price shock. But not all Europeans are set to see the same hit to their living standards. According to estimates by the IMF, the burden for the average family in Finland will be equivalent to an additional 4% of household spending. The picture is considerably grimmer a two-hour ferry ride across the Baltic Sea. In Estonia households face a hit of around 20%.

Between these two countries lie most of the continent's economies (see chart). On ►►

## Gas guzzlers

Increase in spending owing to higher energy prices\* 2022, % of total household spending

\*Forecast based on futures prices from May 2022 compared with those from January 2021  
Source: IMF



▶ average, Europeans spend a tenth of their incomes on energy. Richer families tend to have bigger houses and cars, but the increase in energy costs that results from this is generally not as big as the difference in incomes. That leaves poorer households spending more of their budgets on energy. The same pattern holds between countries as within them. Europe's poorer former-communist east is more vulnerable to higher prices than its rich Nordic north.

Dependence on natural gas is another important factor in assessing vulnerability. Wholesale prices have doubled since Russia's invasion of Ukraine. Coal prices are also up, but by a slightly more manageable 60%. Meanwhile, the price of renewables is unchanged. Thanks to a mostly unified market for natural gas European countries face similar wholesale prices: power generators that use gas in Bulgaria, on the continent's eastern flank, pay roughly the same as those in Ireland, on its western one.

Yet countries differ in their dependence on the stuff. Less than 3% of Sweden's energy comes from natural gas, with hydroelectricity, wind and nuclear providing the bulk of it. Swedish homes are heated using communal systems, often fuelled by wood chips, or through heat pumps attached to the electricity grid. That puts the average increase in household spending at around 5% of budgets, compared with 10% in Britain, which depends on natural gas.

The pass-through from wholesale to retail prices also differs. In many countries, utilities buy gas on long-term contracts and hedge their exposure to wholesale price increases. Different market structures then mean prices pass to consumers at different frequencies. In Spain, for instance, consumer tariffs are typically updated every month (though it has capped gas costs for power generators). In Poland they are adjusted only twice a year.

Elsewhere, governments have frozen costs. In France, where *Électricité de France* (EDF), a state-owned utility, dominates the market, the government has capped price rises at 4%. Most of the country's electricity usually comes from nuclear power, but long-delayed maintenance means it is now being imported from neighbours, where it is often generated by burning gas. The government absorbs the costs through its ownership of EDF.

Capping price rises reduces the incentive for households to cut their energy use. It also disproportionately helps the rich. A far better option is to target support at the neediest. Yet, according to calculations by the European Central Bank, only 12% of EU states' spending on measures to limit the impact of higher energy prices has been targeted in such a manner. An unevenly distributed energy shock requires more redistribution in response. ■

## Property in China

# A finite problem

HONG KONG

## Mortgage boycotts are a symptom of a broader crisis

THE GERMAN mathematician David Hilbert once imagined a hotel with an infinite number of rooms. Even if all of the rooms were occupied, he pointed out, the hotel could accommodate a new arrival, simply by asking each guest to move into the room next door. One guest would move into a second guest's room, freeing up a spot for the new arrival. The second guest would move into a third guest's room, and so on. With an infinite number of rooms, the sequence would never end.

For years, China's property developers operated along similar lines. They would sell flats far in advance of building them. The money raised for these flats was supposedly reserved for building them, just as each room in Hilbert's hotel was supposedly reserved for an existing guest. But developers would instead use the money for other purposes, such as buying land. When the time came to pay for construction, they would sell more unbuilt flats and use that money instead. Just as Hilbert's hotel accommodated each guest in the room next door, China's property developers built each pre-sold flat with the money from the next pre-sale. As long as there were always new buyers, the sequence could go on.

Unfortunately, China's developers are now running out of rooms. Their sales in the 12 months to June fell by 22% compared with the previous 12 months. Advance sales fell even faster (see chart). This painful brush with finitude has left many developers without enough cash to continue building the flats their customers have already bought. China's developers have started work on over 6bn square metres of property in the past three years. They have

completed less than half that amount. In the past homebuyers could do little about these delays. They had already handed over their money, after all.

But although they have paid their developers, they are still paying their banks. In recent months, angry homebuyers have threatened to stop repaying their mortgages if developers do not resume work on their flats. According to a crowdsourced document circulating online, this mortgage strike has spread to nearly 100 cities and over 320 projects, including a Dragon City, a Peacock City and a Phoenix City. Over 40 of these projects are in Zhengzhou, the capital of Henan province.

How widespread could boycotts become? There are some limits to their growth. Striking mortgage-holders could end up on credit blacklists, damaging their access to loans. And in China, points out S&P Global, a ratings agency, most individuals cannot declare bankruptcy, since "their debts will never be forgiven".

In a gloomy scenario, mortgage loans worth about 2.4trn yuan (\$350bn) could turn sour, reckons S&P Global. That amounts to roughly 1.3% of total bank loans, enough to endanger some smaller lenders, but not enough to pose a systemic threat to the banking system.

The true significance of the boycotts lies elsewhere. They show that Chinese households no longer believe that a flat bought in advance will necessarily be delivered. This loss of faith is not confined to the protesters. It is also showing up in weakening pre-sales, especially for distressed developers. A reluctance to buy new homes poses a bigger threat to China's economy than the more conspicuous refusal to repay existing mortgages. Weak sales will further squeeze the revenues of developers, adding to construction delays and deepening disillusionment.

How can this vicious circle be broken? In Henan, two state-owned enterprises (a developer and a "bad bank") have set up a relief fund to acquire distressed projects and see them through to completion. But China's local governments lack the cash to revive confidence, according to Andrew Batson of Gavekal Dragonomics, a research firm. He believes a credible plan will require the central government to step in. It is understandably reluctant to plough more resources into a sector that already commands too big a share of the economy. But new money invested in stalled projects could yield a double dividend, helping both to build unfinished flats and to rebuild confidence in pre-sales.

In the longer term, China's developers need a less frenetic business model. They will have to rely less on selling flats in advance and starting the next project before finishing the last. In China, the demand for housing is vast. But it is not infinite. ■

### Advances retreat

China, pre-sales\* as % of new property sales  
12-month moving average



Source: Haver Analytics

\*Properties still under construction

## Hedge funds

## Shorts, squeezed

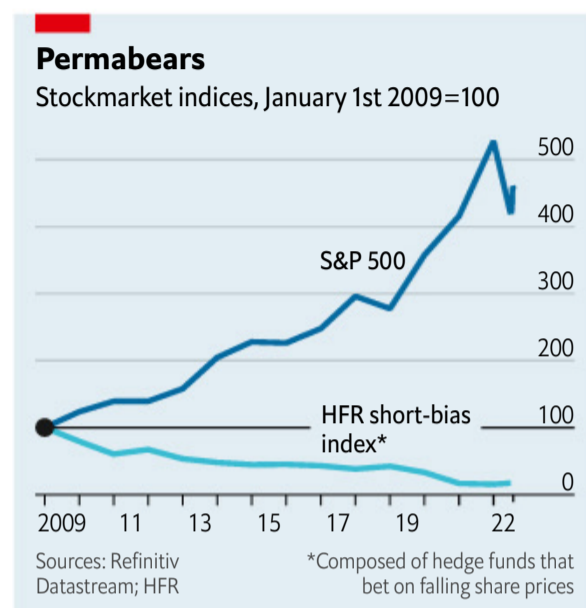
## Short-sellers are struggling despite a bad year for stocks

TO NAPOLEON, THEY were “treasonous”; to Tom Farley, a former boss of the New York Stock Exchange, “icky and un-American”. Short-sellers, who bet against the stockmarket, have always been unpopular—and essential. Today’s big names rose to fame by exposing corporate wrongdoing and irrational exuberance. Michael Lewis’s “The Big Short”, a popular account of the global financial crisis of 2007-09, puts the “misfits, renegades and visionaries” who bet against overvalued mortgage-backed debt at the centre of the story.

On the face of it this year ought to be a glorious period for short-sellers. Markets have plunged on fears of persistent inflation. Sagging growth makes it more likely that securities will fall in price rather than be buoyed by a rising tide. Higher interest rates and tighter credit conditions make it harder for poorly performing or outright fraudulent firms to stagger on by loading up on debt. Despite a recent uptick, the S&P 500 index of large American stocks is down by 12%. But the “short-bias index” of hedge funds that specialise in short-selling constructed by HFR, a research firm, has not risen by anywhere near enough to make up for years of poor performance in more difficult conditions (see chart).

Short-sellers are understandably gloomy. Andrew Left, an outspoken activist short-seller, said in 2021 that his firm would stop publishing “short reports” on companies it thought were overvalued, after 20 years of doing so. Bill Ackman of Pershing Square, who during the financial crisis ran high-profile positions against Fannie Mae and Freddie Mac, two American government-sponsored mortgage-finance firms, announced earlier this year that his hedge fund was quitting the business of activist short-selling. In recent weeks Carson Block, who burst onto the scene in 2011 with a bet against Sino-Forest, a Chinese forestry firm that was felled amid a fraud scandal, publicly wondered whether it was time to throw in the towel.

What explains the malaise? Some technological changes should have helped short-sellers. The proliferation of alternative data sources and open-source intelligence ought to make it easier than ever to unearth corporate malfeasance. Earlier this year, intelligence agencies and newspapers alike used satellite imagery to follow the build-up of Russian troops on Ukraine’s borders. The same methods



could find companies hiding stalled operations, says Dan Nord of Maxar Technologies, a firm that uses satellites to photograph 4m square kilometres of the Earth every day. Whereas distant supply-chain snarls, mothballed mines and shuttered ports would once have been brushed over in company filings, today they can be identified with ever-increasing precision.

Yet other changes have made the lives of short-sellers harder. Thirteen years of almost relentlessly buoyant equity markets, pumped up by low interest rates and a flood of quantitative easing, have left those betting on falling prices bloodied and bruised. Between the start of 2009 and the



end of 2021, the S&P 500 quintupled, while HFR’s short-bias index dropped by 85%. Kynikos Capital (since renamed Chanos & Co, after its founder Jim, who predicted the downfall of Enron) managed \$7bn at its peak in 2008; today that has fallen to around \$500m. Muddy Waters, Mr Block’s outfit, has assets of around \$200m.

When compared with the tens of billions managed by traditional “long” funds, that leaves little scope for chunky management fees. And even if a bet is successful, the potential return is capped while the potential loss is not: a stock’s price cannot fall below zero, but it can rise indefinitely. “I can make good money on our short calls,” says Mr Block, “but it’s hardly life-changing money.”

The final, euphoric phase of the recent bull market was accompanied by a stampede of retail investors into “meme stocks”, sometimes motivated by a desire to drive up the price and give short-sellers a bloody nose. Even though interest in meme stocks has slumped along with the market this year, their rise led some short-sellers to decide “this was never going to work again,” says Mr Chanos. “They thought if those stocks could trade there, any stock could trade anywhere.”

At the same time, regulators and enforcement agencies that once used short reports as starting points for criminal investigations are increasingly investigating the short-sellers themselves. A report in 2016 accusing Wirecard, a German fintech star, of fraud and corruption resulted in a four-year investigation by Bavarian state prosecutors and the German financial regulator into the shorts who wrote it. (Wirecard collapsed into insolvency in June 2020.) A recent flurry of subpoenas from America’s Justice Department to short-sellers—including Mr Block’s firm—has left many feeling as if they, rather than the fraudulent companies they try to uncover, are the enemy.

Some fear that short-selling is just a fundamentally bad business, in which many of those involved are motivated more by the thrill of the chase than the opportunity for outsized profits. When you publish flattering research on companies, says one hedge-fund manager, “generally people like you, because generally people are long. Everyone hates you when you’re short.” That hostility translates into an unwillingness to listen to even the most well-argued short case, making it difficult to realise profits from the position.

It has a much darker side, too. Mr Left decided his firm would stop publishing short reports after retail traders on social-media platforms shared his personal information online and sent threatening texts to his children. Warren Buffett, notes an industry veteran, shorted stocks early in his career: “He doesn’t talk about it now.” ■

## Free exchange | America v Europe

*Why a comparison of riches leaves both sides red-faced*



WHEN DAVID HOCKNEY'S mother visited the British artist in Los Angeles she made an observation that points to the difficulties with transatlantic economic comparisons. "Strange," she said, after a couple of days in the sun, "all this lovely weather and you never see any washing out."

It is an observation many European visitors have echoed. American travellers to Europe, meanwhile, often despair at washer-dryer machines that leave clothes damp. Indeed, for some American writers the lack of standalone dryers is symbolic of the continent's backwardness. While economic statistics should solve such debates—by allowing for apples-to-apples comparisons—they are not immune to the problems posed by cultural differences. Is it that Europeans cannot afford proper tumble dryers? Or are they simply getting their "drying services" free of charge?

Questions like these are important when comparing countries. On the surface, America has by far the best case for prosperity. Gross domestic product (GDP) per person is almost \$70,000. The only European countries where it is higher are Luxembourg, Switzerland, Norway and Ireland, where figures are distorted by firms' profit shifting. In Germany, Europe's economic powerhouse, GDP per person (adjusted for purchasing-power parity) is \$58,000. That puts it level with Vermont, but far below New York (\$93,000) and California (\$86,000). The comparisons are even less flattering for other European countries. Incomes in Britain and France are equal to those in Mississippi (\$42,000), America's poorest state.

Yet a lot is hidden by these figures. To understand why, consider how they are calculated. Spending is deflated by some measure of price, to allow accurate comparisons between countries of the amount of goods and services purchased. For manufactured goods this is a straightforward calculation: the amount Americans spend on dryers, divided by an index of their cost, will give a pretty accurate figure for total consumption.

For services, it is harder to work out a reasonable deflator. And that matters because it is here, rather than household appliances, where Europe and America differ most. Combined spending on health care, housing and finance accounts for about half the difference in consumption between America and the biggest European economies. In 2019 Americans consumed \$12,000-worth of

health services per person; Germans managed just \$7,000.

The difficulty in working out a reasonable deflator is partly conceptual. What are people paying for when they buy health care, a service or an outcome? Is a unit of "health-care services" the cost of a specific treatment or the cost of health? What does being healthy even mean? International price indices simply (and a little unsatisfactorily) calculate the price per treatment. These differ substantially. The OECD, a club of mostly rich countries, estimates that a hip replacement in Norway costs seven times as much as one in Latvia and Lithuania. In any case, while American prices are higher than European ones, the gap is not big enough to account for the difference in health-care consumption: Americans also undergo lots more medical treatment.

Simon Kuznets, a Nobel-prize-winning economist and statistician, suggested estimates of GDP should exclude things an "enlightened social philosophy" would consider harms rather than benefits. For him, that included weapons, advertising, much of finance and anything necessary to "overcome difficulties that are, properly speaking, costs implicit in our economic civilisation".

Many Europeans would suggest this category rightfully includes American health-care spending. Life expectancy in America is five years lower than in Italy; lots of money is spent fixing the damage done by higher levels of violent crime, traffic accidents and obesity. Follow Kuznets's advice—by removing from the calculation finance, health, public administration and defence spending—and the gap between America and Germany in GDP per hour worked drops from \$11 to just \$4.

Much of the remaining gap is accounted for by "housing services", a category of consumption similarly bedevilled by conceptual difficulties. International comparisons are done on the basis of the rental cost per square metre. That flatters sparsely populated America and its sprawling cities, where rents are generally cheaper. While nearly everyone would rather have a bigger house, preferences for suburban over urban living are hardly universal.

### Top dollar

There are diminishing returns to America's spending on health care. But treating all of it as an additional cost would be a mistake. Cancer survival rates are higher in America than Europe. Health-care spending can be considered a luxury good that a richer country may choose to spend more on (Germany, Norway and Switzerland spend the most in Europe). Meanwhile, as American defence hawks like to point out, Europe's low military spending is possible only thanks to America's largesse and the security it provides.

America has other genuine advantages. The combination of higher productivity and the fact that workers spend more time at work allows Americans to enjoy greater quantities of consumer electronics, cars, furniture and clothes. The only categories in which Germans and the French consistently consume more are education, spending abroad, and food and drink, suggesting there is something to stereotypes of Europe's cosmopolitan café culture and America's infatuation with consumer goods.

Still, while arguments can be made for Europe, there is no way of slicing the data, despite your columnist's best efforts, to make the continent's biggest economies richer than America. Even in the areas where Europe does consume more than America, the old-world economies are not ahead by much. Maybe the true lesson of the comparison is that neither side ought to be satisfied: Europeans should be unhappy with their lower incomes; Americans really should be getting a lot more from their riches. ■

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The 24th International AIDS Conference

## Protest and survive

MONTREAL

**Despite setbacks, HIV can be beaten. But doing so will take patience and money**

IT IS A tribute to human ingenuity and determination that AIDS no longer makes headlines. That is because HIV, the virus which causes it, is on the run. According to the latest update by UNAIDS, the UN programme that keeps tabs on such matters, deaths from AIDS-related illnesses have been falling since 2004 and new infections since 1996. Indeed, the fact that the number of people living with the virus (currently about 38m) continues to rise is actually good news. It means they are being kept alive by antiretroviral drug therapy (ART), rather than dropping out of the statistics by dying. But HIV still kills in numbers that would never be off the front pages if a war, rather than a virus, were the cause. So far, it has ended the lives of some 40m people, with 650,000 of those deaths having happened in 2021.

There is, moreover, a feeling of nervousness among doctors and activists alike. Funding directed at the problem in poor and middle-income countries has shrunk since 2018. And the year-on-year fall in new infections in 2021 was the smallest since 2016. This may be a blip. Co-

vid-19 has changed immediate medical priorities in many countries, to the detriment of HIV control. But if blip turns to slide, things could go wrong quite fast in some places, particularly in Africa.

Balanced against that, though, the scientific news about AIDS is positive. New treatments—and particularly new preventions—are being developed and deployed, and an unexpected side-effect of covid has been a novel approach to vaccination that seems well-suited to tackling HIV as well.

To discuss these matters, exchange intelligence and make battle plans, a crowd of researchers, clinicians, activists and patients recently gathered under the auspices of the International AIDS Society (IAS). This latest meeting, the 24th, was held in Montreal—a venue legendary in the field of AIDS. This was the place where, in 1989, activists and patients gatecrashed what had, until then, been a purely scientific gather-

ing, and created the productive hybrid that these meetings have now become.

The AIDS establishment, activists and scientists alike, love a slogan. One of the first, “3 by 5”, captured the aspiration, promulgated by the World Health Organisation (WHO) in 2003, to put 3m people on ART by 2005. This was followed in 2014 by the UNAIDS target of 90-90-90: the intention that, by 2020, 90% of those living with HIV would know their status, that 90% of that 90% would be taking advantage of treatment, and that 90% of those thus on treatment would have the virus suppressed within their bodies.

U=U

The slogan *du jour*, though, is “U=U”, dreamed up by the Prevention Access Campaign, a group of activists. This is not a mathematical identity. The two us stand for different things: “undetectable” and “untransmittable”, respectively. But it is this equation, above all, which makes attempts to stop HIV spreading realistic—for the idea it encapsulates is that someone for whom ART has suppressed viral load to the point that it is undetectable cannot then pass the virus on.

This may not sound surprising, but it was, until quite recently, hotly contested. Only with publication in the 2010s of well-controlled studies which proved the point has U=U, known more formally as “treatment as prevention”, been universally acknowledged. The point, though, is obvious. Find, identify and treat every case of ►►

→ Also in this section

71 Forming continents

▶ HIV infection on the planet and that would be the end of the pandemic. The latest UN aspiration, announced in 2021, is not quite that ambitious. It is to achieve 95-95-95 (and a whole lot of other targets, many of them social, rather than strictly medical) by 2025. That, though, is ambition enough.

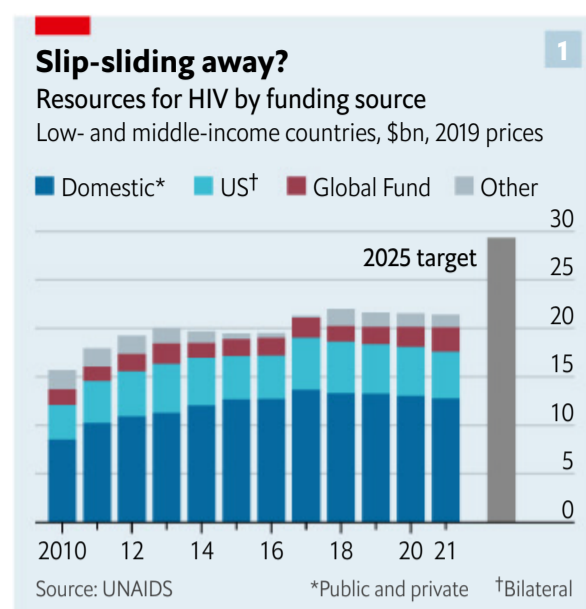
As Paul DeLay, who helped make the relevant calculations, explained, modelling shows that reaching those various targets will be needed to achieve the wider UN goal of ending AIDS as “a public-health threat” by 2030. The UN defines this as a reduction in new incidences of, and mortality from, HIV by 90%, compared with 2010. More specifically, the idea is to drive countries below an incidence-to-prevalence ratio (IPR) of 0.03. The IPR is defined as the number of new infections occurring per year, divided by the number of people living with HIV in a given population. If this value is below 0.03, the epidemic will start contracting of its own accord. At the moment, according to UNAIDS, of 117 countries with a published estimate, 31 have an IPR below that value.

None of this comes cheap, though. It is the additional targets beyond 95-95-95, including such things as more-granular data collection and more effort to reach particularly vulnerable populations, rather than a simple desire for extra “business as usual” money, that has so massively put up the amount of cash UNAIDS reckons will be needed in three years’ time (see chart 1).

At the moment, there is some way to go to reach even the headline goal of 95-95-95. According to a UNAIDS update the numbers last year were 85-88-92. But even if the deadline slips, as it did for both 3 by 5 and 90-90-90, provided the political will to get there is maintained and the money continues to flow there is no obvious reason why this goal should not eventually be met.

Moreover, other pharmaceutical tools than ART are now available to assist. The most promising is pre-exposure prophylaxis (PrEP), which involves giving drugs that ward off infection to those who feel they may need them. PrEP is an idea that has long been discussed, and the best established version, a daily oral preparation called Truvada, has been available for a decade. But in the past two years prescriptions for Truvada and its generic equivalents have taken off, with 1m new recipients in 2020 and 800,000 in 2021, according to UNAIDS.

Admittedly, as Anthony Fauci, President Joe Biden’s chief medical adviser and a doyen of the field of AIDS, pointed out in his pep talk to the meeting, those figures are still far short of the tens of millions of people who could benefit. But even tens of millions might seem small beer compared with the world’s population. For the truth is that AIDS is not an equal-opportunity killer. Some people are at vastly greater risk



than others.

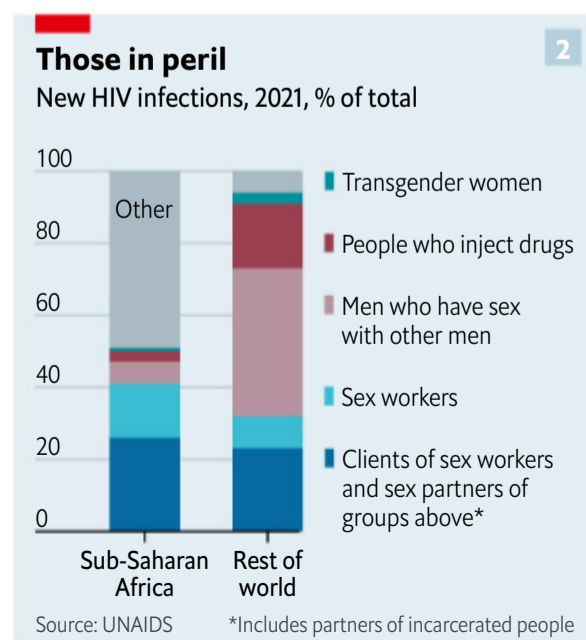
This was highlighted in the UNAIDS report (see chart 2). Even in sub-Saharan Africa, the part of the world where HIV is most widespread, about half of new cases are in recognised risk groups (sex workers and their clients, gay and bisexual men, transgender women, injecting drug users, and the partners of all of these groups). In the rest of the world that figure is 94%.

### The most at risk

A consequence of this is that those most at risk often know who they are and so will come forward for PrEP—or, if they do not, can be sought out and offered it. And since some of those most at risk are also in a position to infect many others, breaking the chain of transmission here is a winning strategy.

Moreover, as technologies tend to, PrEP is getting better. Besides Truvada and its generic equivalents, and a closely related product called Descovy, two other approaches are now available.

Remembering to take a pill every day is a nuisance, so there is considerable interest in an injectable form of PrEP called cabotegravir. This approach, approved by America’s Food and Drug Administration (FDA) in December 2021, requires a jab only



once every two months.

The third PrEP offering, recommended in 2021 by the WHO, is also long-lasting. It is the dapivirine vaginal ring (DVR), a flexible device made of silicone impregnated with a powerful antiviral agent. This needs replacement but once a month. Unlike Truvada and Descovy, and cabotegravir, all of which have drug companies behind them (Gilead Sciences for the first two and ViiV Healthcare for the third), the DVR is the product of a charity, the International Partnership for Microbicides, founded in 2002 by Zeda Rosenberg and still run by her.

ART, too, now offers an alternative to daily pill-popping. Cabenuva, a combination of cabotegravir and a second drug, rilpivirine, was approved by the FDA for use as a monthly injection in January 2021, and in some circumstances that approved interval has been raised to two months.

And then there is that idea borrowed from the response to covid: deploying mRNA vaccines against HIV.

The search for an HIV vaccine goes back almost as far as the identification of the virus itself. The result has been diddly squat. An important reason is that, unlike viruses that have been successfully vaccinated against in the past, HIV plays cat-and-mouse with the body’s immune response, as each tries to out-evolve the other. Mimicking this process with a vaccine is difficult. But mRNA offers a way to do so.

Molecules of mRNA carry the plans of proteins, or fragments thereof. In the case of those used in an AIDS vaccine, these are bits of the viral envelope. These plans are then read by body cells and turned into envelope fragments which go on to stimulate an immune response. Crucially, mRNA is easily tweaked to generate novel versions of these envelope fragments. That, researchers hope, will allow a series of vaccinations to mimic the process of co-evolution and thus coax the immune system towards producing the desideratum of an HIV vaccine: so-called neutralising antibodies which disable the virus.

There are, then, plenty of tools both around already and in the pipeline. But they need to be deployed correctly. Here, Dr Fauci had some troubling news. These were data on ART compliance, and they showed that in America people adhere properly to their regimes only about 40% of the time, suboptimally about 20% and poorly about 40%. That emphasises that however good a drug is, it is no good if people don’t take it or take it badly. People, as well as immune systems, often need to be coaxed into doing the right thing.

As barriers to compliance, or seeking treatment in the first place, Dr Fauci mentioned things ranging from simple forgetfulness, via housing and food insecurity, to stigma (always a problem with HIV, given prejudiced social attitudes towards the ▶▶

ways it is spread), misuse of alcohol and illegal recreational drugs, and even “pill fatigue”. On top of these, in countries less favoured than America, one might add poor education—particularly, in many places, of girls—criminalisation of (as opposed to prejudiced attitudes towards) homosexual behaviour, criminalisation of sex work, and poor medical infrastructure.

Such things are, indeed, among the cost-raising non-medical targets of the UN’s 2025 goals. But many of them will require either political action that is unlikely soon, or behavioural changes in people beyond those infected or in imminent risk of infection. That is a tall order and, it might be argued, one which risks detracting from focused and measurable targets for pill-popping. In the end, though, closing the gap between those on treatment (some 29m) and those who would benefit from being so (a further 10m) depends on it.

### A game of hide and seek

All of the ART in the world is not, however, the same as a cure—even though a compliant user of ART has almost the same life expectancy as an uninfected individual. Others are working on trying to cure those already infected. There is no lack of ideas, but the problem is that HIV’s life cycle, a part of which involves copying its genes into the nuclear DNA of cells it infects, means it can lie dormant in those cells indefinitely. Antiretroviral drugs can deal with it when such a cell awakens. But they can neither cleanse DNA so hijacked nor recognise and kill cells so afflicted.

In a session held before the main meeting began, Sharon Lewin of the University of Melbourne, who is the incoming president of the IAS, outlined the options. These include “shock and kill”, which would activate dormant carrier cells, exposing them to attack by drugs; recruiting the immune system in novel ways to attack dormant cells as they wake up; gene therapy that modifies immune-system cells collected from a patient to introduce a genetic change that protects them from HIV infection and then re-transfuses them back again; and similar therapy that works directly on cells in the body to excise HIV DNA from their chromosomes.

All of these approaches have their drawbacks. Progress is slow. Unlike antiretrovirals, which are small, easily synthesised molecules that can be stored without difficulty, any practical therapy that might result from them is likely to be fiddlesome and expensive, at least to start with. But maybe not for ever. ART itself started life as regimens which required multiple doses a day and cost thousands of dollars a year. Now, a single, daily pill costing 25 cents will do the job. Technology, once invented, always gets better. You just have to come up with it in the first place. ■

### Forming continents

## Impact creator

### Earth may have been shaped by forces from outer space

THE EARTH is a poor archivist. The rigid tectonic plates of its outer layers are continuously in motion, sliding over one another to swallow almost all records of the past, melting them into the mantle and then casting them anew. This makes it difficult to reconstruct the 4.5bn-year-old planet’s formative years.

A particular problem is the crucial biological detail of how the first continents came to be. Studies of ancient rocks suggest that fragments of solid crust existed as far back as 4bn years ago, when the Earth was mostly covered in water, but their genesis remains disputed. While plate tectonics are the dominant mechanism for generating new continental crust today, in the distant past Earth’s subsurface temperatures are widely thought to have been too hot to allow plates to form.

A paper published this week in *Nature* attempts to resolve this conundrum. Tim Johnson of Curtin University, Australia, and his colleagues argue that the planet’s transformation was not triggered by forces from within, but from outer space—in the form of collisions from meteorites that disrupted the surface, causing fragments of the crust to melt in the presence of water, cool and resolve themselves into buoyant patches of land that would later act as nuclei for new continents.

Dr Johnson’s thesis is not new, but the lack of direct evidence means it has never taken root. The more popular explanation for the first continent formation points the

finger at plumes of hot matter rising from the Earth’s mantle to the surface, much like bubbles in a lava lamp. Then, if sufficiently hot, their underside would melt to produce buoyant granite, leading to the first continental plateaus.

The new study offers evidence that sits uncomfortably with this theory. Dr Johnson and his colleagues looked at the Pilbara craton, an approximately 3.5bn-year-old slab of north-western Australia, roughly the size of Germany, which represents one of the few remaining scraps of the early Earth’s continental crust.

The team traversed the craton to collect zircon crystals, a mineral with two properties ideally suited to the task. First, their content of radioactive uranium decays to lead at a rate that can be used to calculate their age. And second, the isotopes of oxygen found within their structure are representative of the environment in which they grew. Zircons whose ratio of oxygen-18 to oxygen-16 is 0.5% higher than found in seawater, for example, would have originated far below Earth’s surface. Those with values closer to those found in seawater formed much nearer the crust.

Analysis led the researchers to conclude that the oldest crystals on the Pilbara—those formed around 3.5bn years ago—must have originated close to the surface. This favours impact formation, as zircons transported by mantle plumes would have more profound origins. “Giant impacts plus water is a really good way of making a continent,” says Dr Johnson.

The textbooks will not be rewritten overnight. Marion Garçon, a geologist at Clermont-Auvergne University in France, finds the evidence of impact formation plausible on a local scale, but says more evidence will be needed to extrapolate it planet-wide. Fortunately, this can be done. Ancient continental fragments exist in other parts of Australia as well as Canada and South Africa. Analyses of their constituent zircons could well provide valuable supporting evidence that Earth’s continents owe their existence to bodies from outer space. But the authors will also need to explain why zircons previously found at other, even older, sites do not display the same telltale signature of impact.

This work could be significant in other ways. While the rate of asteroid collisions experienced by early Earth generally declined over time, it may have spiked some 3.9bn years ago during a postulated event known as the Late Heavy Bombardment (LHB). What are taken by some as signs of the LHB pockmark the static surfaces of Mars and the Moon. Earth’s constant ructions, however, will have destroyed any signs of it. If Dr Johnson is right, then the formation of the continents could be the first earthly evidence of one of the solar system’s most dramatic moments. ■



Here lies history



## Interest rates

## Bernanke v Chancellor

## Duelling books reveal the clashes between central bankers and their critics

THERE IS A particular kind of critic of central banks who says that setting interest rates—and especially setting them low—is an unwarranted interference with the free market. In a system of paper (and electronic) currency, however, policymakers have no choice but to set what economists call a “nominal anchor”, a peg that determines the value of money. Decades of theory and evidence lie behind the modern approach of pegging interest rates with the ultimate goal of controlling inflation. Yet nominal anchors are inevitably somewhat arbitrary because paper money has no inherent value. The critics who label as artificial the low interest rates that have prevailed in the world economy in recent decades must therefore answer the question: low relative to what?

“The Price of Time” is the answer of Edward Chancellor, a historian and financier who has written a book by that name. Humans prefer jam today to jam tomorrow. Interest rates are the reward for deferring gratification, for renting out money that could have been spent today. When rates fall too low, grave consequences follow:

**The Price of Time.** By Edward Chancellor. *Atlantic Monthly Press*; 416 pages; \$28. *Allen Lane*; £25

**21st Century Monetary Policy.** By Ben Bernanke. *W.W. Norton*; 512 pages; \$35 and £24.99

financial instability, higher inequality and pain for savers. As he makes his case, Mr Chancellor’s panoptic survey of the history of interest, and what classical economists said about it, will not fail to dazzle. The argument, however, is seriously flawed.

To see why, look to “21st Century Monetary Policy” by Ben Bernanke, who led America’s Federal Reserve through the global financial crisis from 2006-14 (and a fool in Mr Chancellor’s narrative). His book is partly a historical account of the past half-century or so of policymaking at the Fed and partly a study of the effectiveness and desirability of unconventional monetary tools, such as quantitative easing, that have grown in importance after the crisis.

For the likes of Mr Bernanke, the ultimate determinant of interest rates is the

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global balance between savings and investment which, over time, exerts a magnetic pull on central bankers trying to hit inflation targets. Rates have been low in part because desired savings have risen as societies have aged. It was Mr Bernanke who, in 2005, suggested that a “global saving glut” might have been weighing on global rates.

Mr Bernanke’s framework is more compelling than Mr Chancellor’s, as low or even negative interest rates can co-exist with humanity’s natural short-termism. Suppose someone has a wage income of 100 in their working life and zero in retirement. Though they may not target a 50/50 split, they will save to avoid penury. Lots of people building up a nest-egg—even one that is small relative to their working incomes—creates an imbalance that can, as a result of market forces, push rates lower than their discount rates. “Justice is violated when lenders receive little or nothing,” Mr Chancellor writes. He might as well rage against a population pyramid.

Mr Bernanke dispenses with many of the criticisms of low rates with which Mr Chancellor is taken; what his account lacks in vivacity it makes up for with analytical clarity. For example, he gives short shrift to the idea that loose monetary policy prolongs the lives of “zombie companies” whose capital would otherwise be reallocated to more productive endeavours. If interest rates are low because desired saving exceeds available lucrative investment opportunities, then of course capital will flow to less profitable ventures instead. ▶▶



► Low rates do not tie up capital, but make things easier for entrepreneurs who wish to borrow. Such an argument might not have the lustre of references to intellectuals such as David Hume or Frédéric Bastiat, but it is coherent.

By contrast, “The Price of Time” reads like a jumbled collection of every criticism to have been levied at low interest rates. Mr Chancellor argues that low rates benefit financial interests, then laments that they damage bank profits. He says low rates hurt retirees by making annuities unaffordable, but also that they benefit the elderly at the expense of the young by pushing up property prices. It is not always clear whether he thinks low rates lead to too little investment, too much investment or investment in the wrong sorts of things.

Messrs Chancellor and Bernanke do agree that low rates increase financial risk-taking, for reasons that economists do not fully understand. In theory, low rates should make credit cheaper uniformly; in reality, the riskiest borrowers benefit the most. But whereas Mr Chancellor sees this as sufficient reason to raise interest rates even when the economy is weak, Mr Bernanke sees it as an issue that is too little understood to form the basis of a monetary policy. Should the Fed ever raise rates to try to contain financial excesses? “In principle, yes,” says Mr Bernanke. “But in practice, very cautiously and not very often.”

Hence there is an amusing contrast between the books’ assessments of loose monetary policy after the global financial crisis. Mr Chancellor blames it for almost any ill he can identify in the American and world economies. Mr Bernanke regrets not having stimulated more, given how much the economy subsequently undershot the Fed’s employment and inflation targets. Again, it is Mr Bernanke’s account that is more convincing—for the simple reason that critics of loose money in the 2010s repeatedly predicted severe instability that never came. It took the pandemic to cause markets to crash in the spring of 2020.

Central banks’ recent blunder has not been allowing excessive financial vulnerabilities to build. Their misstep has been a failure to control inflation. On this point, readers are likely to find Mr Bernanke’s book unsatisfactory, probably because it was written before the extent of the problem became clear. Readers may scoff when he describes a “burst” of inflation troubling the economy, or labels Jerome Powell, today’s Fed chair who has looked hapless as inflation has risen, a “consummate 21st-century central banker”. Though the lengthy discussion of alternative forms of stimulus may prove relevant again later in the decade, it will seem academic while central banks are desperately raising interest rates to get price growth under control.

Still, at least today’s central bankers

now recognise the importance of inflation targets. Mr Chancellor would overturn their primacy in pursuit of amorphous goals. His worldview has much in common with the liquidationists of the 1930s who thought the Depression, in which America’s unemployment rate reached nearly 25%, was a necessary purging of the economy. (At one point he argues the 1930s weren’t so bad after all because productivity growth was high.) By all means enjoy his colourful challenge to conventional wisdom. But when the time comes to appoint a central banker, choose someone like Mr Bernanke. ■

### Jazz and the criminal underworld

## Fast and loose

**Dangerous Rhythms.** By T.J. English.  
*William Morrow, 448 pages; \$29.99 and £25*

“STRANGE FRUIT,” writes T.J. English, is “the seminal jazz song.” This haunting ballad, written by a Jewish high school teacher, Abel Meeropol, in 1937 and burned into the collective cultural memory by Billie Holiday (pictured) two years later, portrays the crime of lynching as central to the brutal history of the United States. “It is generally agreed that jazz as a new musical art form began to take shape in the early years of the 20th century. It is not generally commented upon that jazz, in its origins, was a response to the horror and reality of



Lady sings the blues

lynching in America.”

Mr English makes the persuasive argument that the birth of jazz, rooted in the African-American experience, was “nothing less than an attempt to achieve salvation through the tonal reordering of time and space.” But jazz could not scrub off the stain of violence. “Dangerous Rhythms” is not a book about music as an art form; it is instead a nuanced account of how, in the 60 or so years between the introduction of Prohibition and the enforcement of the RICO Act—which brought the mafia to its knees in the 1980s—the development of jazz was facilitated by some of the most notorious criminals of the 20th century.

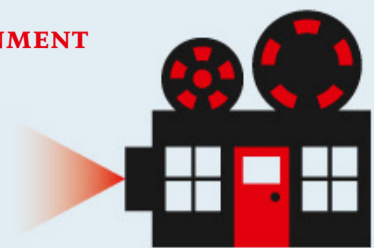
Music brought business to the mobsters’ speakeasies. The most renowned names in jazz history, including Count Basie and Duke Ellington, are linked with the names of the gangsters who fostered their careers. Louis Armstrong got his start in the seedy clubs of Louisiana: “One thing I always admired about those bad men when I was a youngster in New Orleans is that they all liked good music,” he said.

The criminal underworld was a male-dominated place, yet some female performers learned to navigate it. Mary Lou Williams, a pianist and composer, was managed by Joe Glaser (who also represented Holiday and Armstrong); Glaser had helped run Al Capone’s prostitution scheme in Chicago. Williams was under no illusions when it came to the jazz scene in the 1930s: “Everyone was like a hoodlum.”

Mr English—a journalist and author who has written several books on gangs in America and Cuba—chronicles the privileges of white supremacy. Black artists found protection where they could in a society built on injustice. The second half of the book turns to the career of Frank Sinatra. His ties with organised crime are hardly a secret, but Mr English lays out those brazen connections with clarity.

Sinatra became a *padrone* of the music business, a singular achievement among his peers. Mr English notes that Ol’ Blue Eyes’ fame far eclipsed that of the black musicians who had been pathfinders for his art; Sinatra’s ambition—and his whiteness—set him apart. Though the singer was on “the right side of the civil-rights movement, both in words and deed”, was his great financial success “fair market compensation” for his talent? If financial reward were based solely on ability, Mr English says, “Billie Holiday would have lived atop a mountain comprised of diamonds and rubies.”

The author writes that “the dirty little secret of the American dream was that violence was an integral part of social advancement.” His book suggests that was true, but it also reveals the way in which violence helped to nurture one of the greatest of all art forms, too. ■

HOME  
ENTERTAINMENT

"Bambi"

## Burning up

The animated film's depiction of a forest fire is grimly relevant

WHAT IS THE most famous scene in "Bambi"? Eighty years on from the film's premiere in August 1942, there is only one answer: it is the scene in which Bambi's mother dies. The Walt Disney cartoon—ostensibly about a deer gambolling around an idyllic forest—has traumatised generations of youngsters. What is even more impressive is that the scene doesn't actually exist. Whatever memory viewers might have, the film doesn't explicitly show the death of Bambi's mother.

About 40 minutes in (no, it's not in the first ten minutes, although many share that false memory, too), doe and fawn are running from unseen hunters through a snowy meadow. A gunshot is heard. Bambi races back to his shelter in "the thicket", only to realise, after a second of elated relief, that he is alone. His majestic father then looms over him in silhouette and murmurs: "Your mother can't be with you any more." And that's that. There are no poignant last words, no mourning period or slow recovery. The film immediately cuts to a tra-la-la-ing song about falling in love in the springtime, and Bambi's mum is never mentioned again. For Bambi, Thumper and their woodland friends,

death is just an everyday part of growing up. The film's viewers may be perturbed by this attitude, but the animals aren't.

This brisk lack of sentiment is typical of a film which is far bolder than its fluffy reputation might suggest. Adapted from a novel by Felix Salten, an Austro-Hungarian author, Disney's fifth feature-length cartoon is a gorgeous tapestry of different animation techniques. There is no adventure plot or triumph-over-adversity theme imposed on the art: David Hand, the supervising director, simply made a 70-minute chronicle of a wobbly legged deer's learning about life and death.

Watching it now, in the middle of a dangerously hot summer, the most horrifying sequence is the one in which a wild-fire consumes the forest. In later Disney cartoons, this sort of eco-catastrophe would be caused by lightning (as in "The Jungle Book") or by greedy hyenas ("The Lion King"). In "Bambi", however, humans are squarely to blame. Not that any people are depicted: Bambi is warned of a species called "Man", but, just as Hand omitted the killing of the fawn's mother, he chose not to show any humans on screen.

Instead, the flames from an unattended campfire are blown into a tree, and then an unstoppable blaze turns a green paradise into an inferno. No one in particular is responsible. There is no snarling Captain Hook, Maleficent or Cruella de Vil to reassure viewers that only evildoers destroy the environment. Man in general, it seems, is so careless that he would rather lay waste to nature than go to the effort of putting out a campfire.

Again, the film doesn't have any wailing or gnashing of teeth. No one delivers any speeches about the injustice of it all, and no one expresses the hope that it might not happen again. Wildfires are just one more thing that the animals have got used to. And now humans must get used to them as well: a thought as harrowing as the demise of Bambi's mother. ■



New fiction

## Our last summer

**Other Names for Love.** By Taymour Soomro. Farrar, Straus and Giroux; 256 pages; \$26. Harvill Secker; £14.99

"THE FATHER, the son. This is the question, isn't it?" So says Rafik to his child, Fahad, at the outset of Taymour Soomro's debut novel. The relationship between father and son is one of the dominant themes of "Other Names for Love". The fraught dynamic between Rafik and Fahad is also one of the key sources of tension in the book—an accomplished work which spans years and explores desire, inheritance and the power of memory.

Sixteen-year-old Fahad expected to fly to London with his mother for the summer. Instead, his father, a wealthy landowner, has taken him from their family home in Karachi to their feudal estate, Abad. There, Rafik plans to "grow him up" and teach him "how a man should be". He starts by showing Fahad the lie of his many lands, taking him through fields and villages. Rafik receives a hero's welcome from everyone he encounters.

Aware that his son could benefit from the guidance of someone his own age, Rafik introduces Fahad to Ali, "a tough, local sort". Despite their differences, a friendship forms and each comes to help the other: Fahad teaches Ali how to use a knife ▶▶

**Correction:** In the summer double issue of July 30th we incorrectly attributed the photographs in "Hocus focus", the article about magicians and social media. The photographer was in fact John Stanmeyer. Our apologies.



# Johnson The data is in



Whether “data” is singular or plural is a divisive question in English grammar

FOR MORE than a millennium after the fall of Rome, educated Europeans were distinguished by their knowledge of Latin. One of the three subjects of the *trivium*—the basic tier of a classical education, itself based on a Roman model—was Latin grammar. Europeans have long since stopped writing primarily in Latin, but learned people are still expected to be able to deduce that to “decimate” means to destroy a tenth of something (a mutinous legion was punished in this way), or sprinkle *annus mirabilis* and *mutatis mutandis* into their speech.

It is not for lack of knowledge of, or affection for, Latin that *The Economist* marks a change this week. The reform involves one of the most curiously polarising issues an ending on a foreign word has ever generated in English. We will now allow singular use of *data* alongside the plural. Specifically, when considered as a concept—as in *data is the new oil*—the singular will be acceptable, as well as when the data in question is considered as a mass (*the data on this mobile-phone plan is insufficient*). However, when data points are considered as a group of pieces of information, the plural should still be used: *data from the National Oceanic and Atmospheric Administration indicate the hottest summer of all time*.

*Data*, as every child at a grammar school once knew, is the plural of Latin’s *datum*, “something given”. Originally that plural sense was carried over into English. But already in 1702, the Oxford English Dictionary records, came the first appearance of singular *data*, in an astronomy textbook. This was almost 60 years after plural *data* was first recorded.

The rise of computing has changed the balance. While an 18th-century scholar’s data might be a single column of numbers, today’s computers quickly

manage billions of bytes. Data points begin to seem like the water molecules in the ocean and so, in such contexts, to be perceived as a mass. Singular data is now more common than the plural in books, and far more prevalent on the web.

Data is hardly the first foreign word to undergo grammatical change in English. The nearest equivalent is *agenda*, an old plural of *agendum*, “something to be acted on”. Once those collected *agenda* started being thought of as a list, the English singular was born. (*Candelabra*, *stamina* and *insignia* were all Latin plurals, too.) *The Economist*’s style guide prescribes a list of Latin -um words in English that pluralise with -a (*memoranda*, *strata*), but many more that violate Latin grammar and take -ums (*forums*, *stadiums*, *ultimatums*). It demonstrates that those words are now English; Latin rules need not apply.

Those who oppose singular data argue that the word refers to a set of numbers. Yet the properties of the thing itself are not a reliable guide to a term’s grammar. Go to a shop where dried goods are sold from barrels and note rice (a singular) next

to lentils (a plural), and wheat (singular) next to oats (plural). Head to the pasta section and see what happens to other languages’ words in English: *spaghetti* and *lasagne*, both Italian plurals, are singular when served up in English.

Will readers be confused if they see both singular and plural data? Probably not. Plural data in the sense of “data points” will probably appear in one kind of story exclusively (ie, those reporting on a study based on a number of observations), and mass-style singular data in others (especially those to do with computing). In any case, our style guide already allows some collective nouns, like *council* or *staff*, to be singular or plural depending on whether it is the entity or its constituents under discussion, with no resulting chaos.

You will not find a singular *kudo* in our pages (a back-formation of the Greek *kudos*, which is singular however much it may look like an English plural). Nor should you see *a criteria* or *a phenomena*. *Media* will remain plural though, as with data, usage in the wider world varies between singular and plural.

And if you need a piece of trivia for your next cocktail party: that *trivium* mentioned in the first paragraph was, indeed, the source of *trivia*. Exactly as with data, it was a Latin plural—now, for most speakers, it is an English singular. (*Trivia is* is four times as common as *trivia are* in books, and the phrase *a piece of* can only go with singular nouns.) It is poignant that a word that once meant a knowledge of Latin now means a knowledge of impractical random facts.

Johnson does not consider grammar trivial. Precisely for that reason it is time to recognise the facts of English grammar: usage of *data* has changed, and *The Economist* will change with it.



▶ and fork; Ali gives Fahad lessons in how to shoot and how to speak Sindhi. The pair become more intimate, eventually making their true feelings clear during a passionate encounter in a forest.

Decades later, Fahad is a published writer living in London with his partner, Alex. One day he receives a call from his mother informing him that his father is facing financial ruin. Along with his house and his good name, he is losing his mind, and so Fahad returns to his homeland to offer his services. Rafik tasks him with trawling through his files and writing a

book about him. But journeying back to Abad causes Fahad to ruminate on his own story, in particular the life-changing chapter with Ali all those years ago.

“Other Names for Love” revolves around Fahad’s pivotal relationships with strikingly different men. Ali—initially described by sensitive, bookish Fahad as a “savage”—is a well-drawn creation. However, Mr Soomro’s depiction of opposites attracting would have had more emotional impact had he allowed his characters’ romance to develop further.

More successful is the British-Pakistani

author’s portrayal of Rafik and his strained connection with his son (Fahad regards his father as “a cannonball, an avalanche, something giant crashing through the jungle”). The power play between Rafik and Mousey, a relative, is convincing, too. Mr Soomro fleshes out Rafik by highlighting a ruthless streak which enables him to get his own way, raise his profile and crush opposition. He leaves his mark on this elegant and entrancing novel, a book which demonstrates that family ties are not always tight bonds and that “one moment in your life can cast such a long shadow.” ■

## Economic data

	Gross domestic product				Consumer prices		Unemployment rate	Current-account balance	Budget balance	Interest rates		Currency units			
	% change on year ago				% change on year ago		%	% of GDP, 2022†	% of GDP, 2022†	10-yr gov't bonds	change on	per \$	% change		
	latest	quarter*	2022†		latest	2022†				latest,%	year ago, bp	Aug 10th	on year ago		
United States	1.6	Q2	-0.9	2.3	8.5	Jul 8.3	3.5	Jul	-4.1	-6.0	2.8	142	-		
China	0.4	Q2	-10.0	4.0	2.7	Jul 2.4	5.5	Jun#5	2.8	-6.2	2.5	\$\$	-22.0	6.76	-4.1
Japan	0.4	Q1	-0.5	2.0	2.3	Jun 2.2	2.6	Jun	1.5	-6.1	nil	-8.0	132	-16.3	
Britain	8.7	Q1	3.1	3.6	9.4	Jun 8.7	3.8	Apr††	-3.1	-5.0	2.0	133	0.82	-12.2	
Canada	2.9	Q1	3.1	3.6	8.1	Jun 6.7	4.9	Jul	1.2	-3.5	2.7	141	1.28	-2.3	
Euro area	4.0	Q2	2.8	2.7	8.9	Jul 7.6	6.6	Jun	2.1	-4.3	0.9	136	0.97	-12.4	
Austria	9.5	Q1	10.0	3.9	9.2	Jul 8.0	4.3	Jun	-1.0	-4.6	1.4	166	0.97	-12.4	
Belgium	3.3	Q2	0.8	2.2	9.6	Jul 9.3	5.5	Jun	-1.0	-4.8	1.5	170	0.97	-12.4	
France	4.2	Q2	2.1	2.2	6.1	Jul 5.5	7.2	Jun	-1.4	-5.7	1.4	156	0.97	-12.4	
Germany	1.5	Q2	-0.1	1.0	7.5	Jul 8.3	2.8	Jun	3.5	-3.2	0.9	136	0.97	-12.4	
Greece	7.9	Q1	9.7	4.0	11.6	Jul 8.2	12.3	Jun	-5.9	-5.0	3.2	267	0.97	-12.4	
Italy	4.6	Q1	4.2	2.7	7.9	Jul 6.8	8.1	Jun	0.7	-6.1	3.0	245	0.97	-12.4	
Netherlands	6.7	Q1	1.7	2.6	10.3	Jul 10.8	3.4	Jun	7.4	-3.2	1.2	155	0.97	-12.4	
Spain	6.3	Q2	4.6	4.7	10.8	Jul 9.2	12.6	Jun	0.5	-5.2	2.0	175	0.97	-12.4	
Czech Republic	5.1	Q1	0.8	1.4	17.5	Jul 15.2	2.5	Jun†	-1.2	-5.7	4.0	226	23.5	-7.8	
Denmark	6.3	Q1	-1.9	2.1	8.7	Jul 8.2	2.5	Jun	8.3	0.8	1.2	134	7.18	-11.6	
Norway	4.8	Q1	-3.8	3.2	6.8	Jul 4.8	3.2	May††	16.4	8.7	1.4	76.0	9.51	-6.1	
Poland	9.4	Q1	10.4	4.5	15.5	Jul 13.5	4.9	Jul§	-2.5	-3.7	5.5	362	4.51	-13.3	
Russia	3.5	Q1	na	-10.0	15.1	Jul 21.2	3.9	Jun§	10.1	-3.8	8.9	183	61.2	20.8	
Sweden	3.8	Q2	5.7	1.8	8.7	Jun 6.9	8.6	Jun§	3.0	-0.3	1.5	138	10.0	-13.1	
Switzerland	4.4	Q1	1.9	2.6	3.4	Jul 2.9	2.2	Jul	6.4	nil	0.5	86.0	0.94	-2.1	
Turkey	7.3	Q1	4.9	3.2	79.6	Jul 69.7	9.7	Jun§	-3.7	-3.9	16.1	-89.0	17.9	-51.8	
Australia	3.3	Q1	3.1	3.2	6.1	Q2 6.1	3.5	Jun	2.0	-2.4	3.2	208	1.41	-3.5	
Hong Kong	-4.0	Q1	3.6	0.7	1.9	Jun 2.9	4.7	Jun††	1.4	-6.7	2.6	158	7.85	-0.9	
India	4.1	Q1	1.9	6.9	7.0	Jun 7.3	6.8	Jul	-1.5	-6.5	7.3	108	79.5	-6.4	
Indonesia	5.4	Q2	na	5.0	4.9	Jul 5.3	5.8	Q1§	1.0	-4.3	7.1	77.0	14,872	-3.3	
Malaysia	5.0	Q1	na	5.0	3.4	Jun 3.1	3.8	Jun§	2.5	-6.2	4.0	74.0	4.46	-5.2	
Pakistan	6.2	2022**	na	6.2	24.9	Jul 18.5	6.3	2021	-5.3	-7.0	12.9	†††	304	222	-26.1
Philippines	7.4	Q2	-0.4	7.1	6.4	Jul 4.8	5.7	Q2§	-3.6	-7.7	6.0	204	55.7	-9.5	
Singapore	4.4	Q2	-1.0	3.6	6.7	Jun 5.6	2.1	Q2	18.1	-0.9	2.7	127	1.37	-0.7	
South Korea	2.9	Q2	2.9	2.7	6.3	Jul 5.5	2.9	Jul§	3.1	-2.5	3.2	129	1,310	-12.3	
Taiwan	3.1	Q2	-2.9	4.0	3.4	Jul 3.4	3.7	Jun	14.2	-1.2	1.2	78.0	30.0	-7.4	
Thailand	2.2	Q1	4.7	2.9	7.6	Jul 5.7	1.5	Dec§	-0.3	-5.0	2.3	94.0	35.6	-5.9	
Argentina	6.0	Q1	3.5	4.3	64.0	Jun 70.2	7.0	Q1§	nil	-4.6	na	na	134	-27.6	
Brazil	1.7	Q1	4.0	2.0	10.1	Jul 10.2	9.3	Jun§††	-0.4	-6.5	12.2	252	5.05	3.4	
Chile	7.2	Q1	-3.0	1.5	13.1	Jul 11.1	7.8	Jun§††	-7.1	-2.8	6.7	201	889	-12.0	
Colombia	8.2	Q1	4.0	6.3	10.2	Jul 10.2	11.3	Jun§	-5.2	-4.8	11.7	465	4,268	-6.5	
Mexico	2.1	Q2	4.1	2.4	8.2	Jul 7.6	3.3	Jun	-0.8	-3.2	8.5	144	19.9	0.9	
Peru	3.8	Q1	8.1	2.5	8.7	Jul 7.6	6.7	Jun§	-3.6	-2.1	7.9	146	3.93	3.3	
Egypt	5.4	Q1	na	5.9	13.6	Jul 12.9	7.2	Q1§	-6.0	-5.9	na	na	19.2	-18.1	
Israel	9.6	Q1	-1.8	4.9	4.4	Jun 4.3	3.3	Jun	2.9	-1.7	2.4	142	3.26	-0.9	
Saudi Arabia	3.2	2021	na	7.5	2.3	Jun 2.5	6.0	Q1	15.9	10.9	na	na	3.76	-0.3	
South Africa	3.0	Q1	8.0	1.9	7.4	Jun 6.3	34.5	Q1§	-1.1	-6.2	10.0	107	16.1	-8.2	

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.

## Markets

In local currency	Index	% change on:		
		Aug 10th	one week	Dec 31st 2021
United States S&P 500	4,210.2	1.3	-11.7	
United States NAScomp	12,854.8	1.5	-17.8	
China Shanghai Comp	3,230.0	2.1	-11.3	
China Shenzhen Comp	2,180.8	3.0	-13.8	
Japan Nikkei 225	27,819.3	0.3	-3.4	
Japan Topix	1,933.7	0.1	-2.9	
Britain FTSE 100	7,507.1	0.8	1.7	
Canada S&P TSX	19,885.9	1.7	-6.3	
Euro area EURO STOXX 50	3,749.3	0.5	-12.8	
France CAC 40	6,523.4	0.8	-8.8	
Germany DAX*	13,700.9	0.8	-13.7	
Italy FTSE/MIB	22,702.4	0.6	-17.0	
Netherlands AEX	724.3	-1.4	-9.2	
Spain IBEX 35	8,352.8	2.6	-4.1	
Poland WIG	54,955.8	0.2	-20.7	
Russia RTS, \$ terms	1,118.4	1.1	-29.9	
Switzerland SMI	11,155.1	-0.2	-13.4	
Turkey BIST	2,829.6	5.4	52.3	
Australia All Ord.	7,238.7	0.5	-6.9	
Hong Kong Hang Seng	19,610.8	-0.8	-16.2	
India BSE	58,817.3	0.8	1.0	
Indonesia IDX	7,086.2	0.6	7.7	
Malaysia KLSE	1,492.3	0.1	-4.8	

% change on:

index	% change on:		
	Aug 10th	one week	Dec 31st 2021
Pakistan KSE	42,494.9	3.5	-4.7
Singapore STI	3,286.3	1.1	5.2
South Korea KOSPI	2,480.9	0.8	-16.7
Taiwan TWI	14,939.0	1.1	-18.0
Thailand SET	1,617.2	1.4	-2.4
Argentina MERV	122,129.9	1.4	46.3
Brazil BVSP	110,235.8	6.2	5.2
Mexico IPC	47,808.2	1.7	-10.3
Egypt EGX 30	9,965.5	4.5	-16.3
Israel TA-125	2,076.3	3.5	0.2
Saudi Arabia Tadawul	12,431.5	1.1	9.7
South Africa JSE AS	69,744.9	1.7	-5.4
World, dev'd MSCI	2,803.4	1.7	-13.3
Emerging markets MSCI	997.2	1.2	-19.1

## US corporate bonds, spread over Treasuries

Basis points	latest		Dec 31st 2021
Investment grade	168	172	120
High-yield	465	518	332

Sources: Refinitiv Datastream; Standard & Poor's Global Fixed Income Research. \*Total return index.

## Commodities

## The Economist commodity-price index

2015=100	Jul 26th Aug 2nd Aug 9th*			% change on	
	month	year			
<b>Dollar Index</b>					
All Items	152.3	155.7	155.8	-1.5	-6.5
Food	139.4	142.9	145.6	-4.9	11.6
<b>Industrials</b>					
All	164.4	167.7	165.3	1.6	-17.4
Nfa†	153.3	147.0	149.7	-8.2	4.8
Metals	167.7	173.8	169.9	4.5	-21.8
<b>Sterling Index</b>					
All items	193.0	194.5	196.7	-3.1	7.2
<b>Euro Index</b>					
All items	166.7	169.3	169.0	-2.8	7.2
<b>Gold</b>					
\$ per oz	1,719.1	1,777.1	1,792.7	3.5	3.8
<b>West Texas Intermediate</b>					
\$ per barrel	104.4	100.6	96.4	-3.2	36.2

Sources: CME Group; Cotlook; Darnmann & Curl; Datastream from Refinitiv; FT; ICCO; ICO; ISO; Live Rice Index; LME; NZ Wool Services; Thompson Lloyd & Ewart; Urner Barry; WSJ. \*Provisional †Non-food agricultural.

For more countries and additional data, visit [Economist.com/indicators](https://www.economist.com/indicators)

## It pays to be friends

### Friendship across class lines may boost social mobility and decrease poverty

PUBLISHED IN 2000, “Bowling Alone” transfixed observers on American culture in a way that few books ever do. In it, Robert Putnam, a political scientist, argued that the steady erosion in social capital—interactions between people who are not family, close friends or colleagues—was ailing America. In the intervening decades, that theory has proved contentious. But new studies strike a blow in its favour.

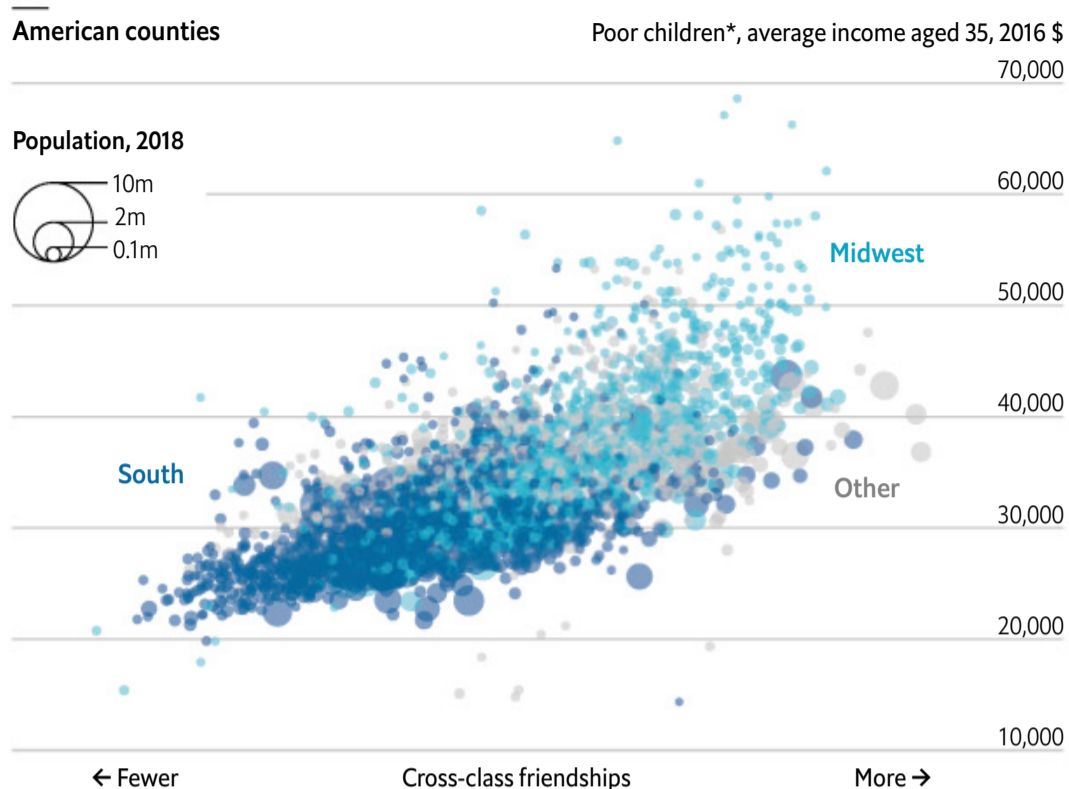
A large research team—including Raj Chetty of Harvard University, Matthew Jackson of Stanford University, and Theresa Kuchler and Johannes Stroebel of New York University—worked with proprietary data from Facebook on 72.2m young American adults. The shape of every person’s network of friends could be converted into empirical scores of social capital in a much finer-grained way than previously possible. And neighbourhood-level measures of social capital could be compared with desirable outcomes.

Most classical measures of social capital, such as civic engagement and intra-class bonding, were not correlated with improved life outcomes, the researchers found. However, one measure looked especially important. “Economic connectedness”—the extent of friendships across social classes—was strongly associated with increased rates of high-school completion, reduced rates of teenage pregnancy and increased income for those born poorer. Moving from a place where friendships across social strata are relatively uncommon (a one-in-four chance of a friendship between someone in the top and bottom halves of the class distribution) to one where it was relatively standard (a one-in-two chance) translated into an 8.2 percentile increase in future earnings.

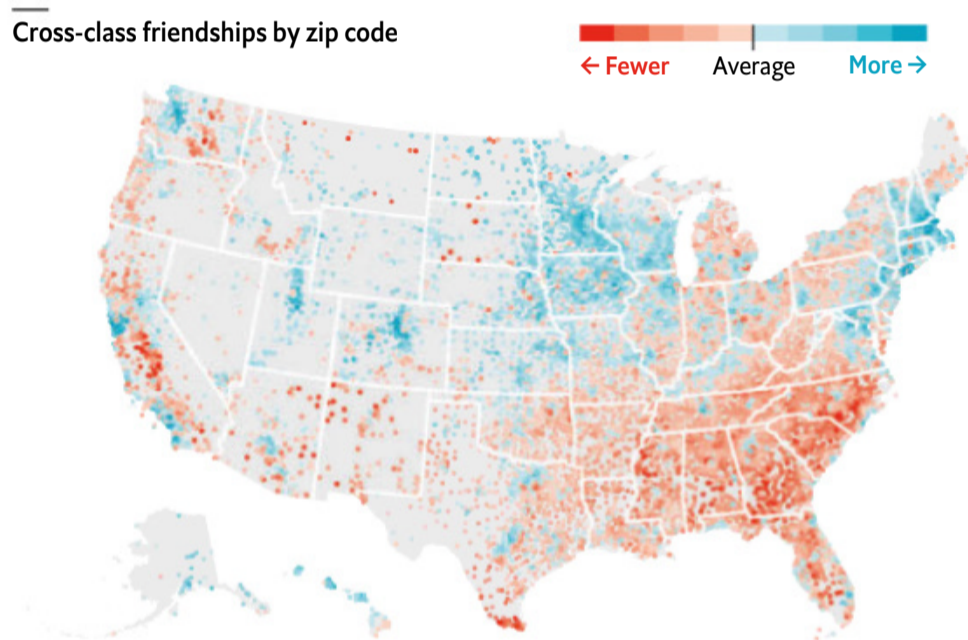
The researchers then separated economic connectedness into two components: the share of wealthier people in a setting (exposure) and the rate at which wealthier and poorer people befriend each other (friending bias). Churches seem a more egalitarian setting than colleges. In universities, cross-class friendships form at a rate 5% lower than would be expected. In religious settings, friendships formed at a rate 3% higher than expected.

Although it uses big data, the study’s findings are largely based on correlations. (It remains hard to experimentally vary social capital.) But the imperative for integration seems stronger still. ■

### → Poor children with more cross-class friendships have better outcomes



### → These vary significantly by geography in America



### → In most settings, there is less mixing than might be expected

	Share of richer peers in setting Relative to expected level with no segregation	Chance of befriending richer peer Relative to expected level from setting
University	+22.3%	-4.7%
Workplace	-3.9	-5.4
High school	-6.5	-4.3
Recreational group	-7.6	-2.5
Religious group	-13.6	+3.2
Neighbourhood	-18.0	-16.6

\*Children with parents in 25th income percentile †Below-median socioeconomic status  
Sources: “Social capital I: measurement and associations with economic mobility” & “Social capital II: determinants of economic connectedness”, by R. Chetty et al., *Nature*, 2022



## The doors of perception

**Ann Shulgin, therapist and experimental drug researcher, died on July 9th, aged 91**

**T**HE FIRST time she tried a hallucinogen, she was nearly sick. The taste of that witch's brew—the thick, brown ooze that you get when you mash the peyote plant down—was so bad that she retched the moment it hit her tongue. My God, it was awful. For a long time all she could do was to sit on her bed and try not to vomit. Then the walls of her bedroom started to shimmer. Then time stilled. Then—if there even was a “then” anymore—the dust motes, floating in the air above her, started to sing. It was Ann Shulgin's first taste of hallucinogens, but not her last, for in her long life she would have around 2,000 psychedelic experiences.

The aim was clear. Not merely to open the doors of perception—to see a world in a grain of sand and heaven in a wild flower—but to step through those doors, and learn. William Blake had done it with poetry. Aldous Huxley, whose writing she loved, had done it with mescaline. She did it that first time with peyote. Later, when she met her beloved husband—the chemist and “Godfather of Ecstasy”, Alexander “Sasha” Shulgin—she did it with more or less anything he made in his lab. And he made a lot: MDMA, PMA, PMMA, mescaline. Though she never liked the stoning drugs. And if you couldn't make love on a drug, as she later said, stretching out her wrinkled hands, then “there's something not quite right.”

Many thought there was something not quite right with all this anyway. Later, when the moral panics got going, and everyone started to agonise over ecstasy, people got so uptight about what they did. It didn't belong in a decent society. But, she would point out, psychedelic experiences weren't so strange. People experienced altered states in everyday life. You can have a complete psychedelic experience just by falling in love, “no question.”

Which, she felt, was nice. Because no one can legislate against that. And falling in love, as she liked to point out, “is also potentially very dangerous”. You could die from it. All those murders.

Though there were other ways to die from love, as well she

knew. She had been in her mid-20s at the time and working in the University of California medical centre as an administrator. Living in the lonely grey world of those who have left one home and not yet found the next. Dinners in cafeterias. Books as best friends. Soul in stasis. Then one day, in the cafeteria at work, a man had appeared at her table, a doctor. He had pale hair and a nice laugh and—and even at her age she sensed this was rare—didn't mind being told that he was wrong.

Though he didn't respond that well when things actually went wrong. A few months later there was a pregnancy. It was the 1950s, and he was married, and ambivalent. So when, at two months, she felt the contractions begin, she coped with the miscarriage alone. She squatted on the toilet, alone. She went to lie on the bed, alone. She woke, alone, in a pool of her own blood. Later, in hospital, she would be told that she had lost six pints of blood. She was struck by that: didn't humans only contain nine? When, lightheaded with blood loss, she saw her reflection in the mirror in hospital she giggled: grey-green, what a funny colour for a face to be.

She finally met Sasha in her 40s, after three previous marriages, and was impressed. He had an Old Testament mane of hair, and he smelt of carnations and cut grass. He invented drugs, he explained, and had taught at the University of California. When she asked him if the drugs he made were safe, he told her straight: no drug is ever safe. Nothing is. Did she really want to give it a try?

They took their drugs with care. They didn't go “banging about” on a Saturday night. They took them calmly, on Sunday mornings, often at his house, often with friends, always with rules. There must be no other drugs in your system; no violence; if there was a problem, a hand should be raised. She knew things could still go wrong. One time, she had wept and wept. And that first time, before Sasha, she had felt a rapidly widening hole, a void, open in her body, just above the navel, below the ribcage. That had been odd.

Their trips, like Huxley's, were recorded. When, on a bright May morning in 1953 Huxley had swallowed four-tenths of a gram of mescaline, he had been watched by a researcher who had recorded his responses to the drug. He had seen books glow like rubies; a slow dance of golden lights; flowers shine with eternal life. When the researcher asked Huxley how he felt about time, he had replied with clarity: “There seems to be plenty of it.”

She had been so pleased to see that Sasha had Huxley on his bookshelves, too. Like Huxley, they approached psychedelia scientifically, documenting delirium according to Sasha's homemade scale. “Plus-one” was the beginning of a trip; it often involved a touch of nausea. Plus-two: visual enhancement. Plus-four was godlike. Plus-four offered, as Sasha's notes to one drug put it, “a tinge of omnipotence, blended with a modest amount of omniscience.” Then, as if in proof of the “modest”: “I forget what the third omni- is, but it's present also.”

They married and kept experimenting. It wasn't just fun. Take a psychedelic, and you might become aware of yourself as a glowing thread in a tapestry and “all those... clichés”. But for her, MDMA was more: it was “an insight drug”. That was its major function. As a lay therapist, she offered it to her patients: it offered insight without self-hatred.

Creating a new drug was, she thought, like composing new music; though not everyone liked the sound of that. In 1994 the Drug Enforcement Administration raided their home. They had violated regulations; they were to be fined \$25,000; their life was turned upside down. She took a little insight from this, too, chiefly that drugs officers were heavy-footed. To Sasha's disgust, they had stomped on some peyote cacti. “Not what I call good manners.”

Later, the mood changed. Others started to follow what she had done. Universities and psychiatrists started to research the benefits of MDMA in therapy. She started to be called a “pioneer” and people started to write papers on how psychedelics can increase “brain connectivity” and “neuroplasticity”. But she would always put it more simply: they allowed you to love yourself. ■

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