

The Economist

The Democrats pass peak progressive

After Abe

Post-quantum solace

Let Catholic priests wed

JULY 16TH-22ND 2022

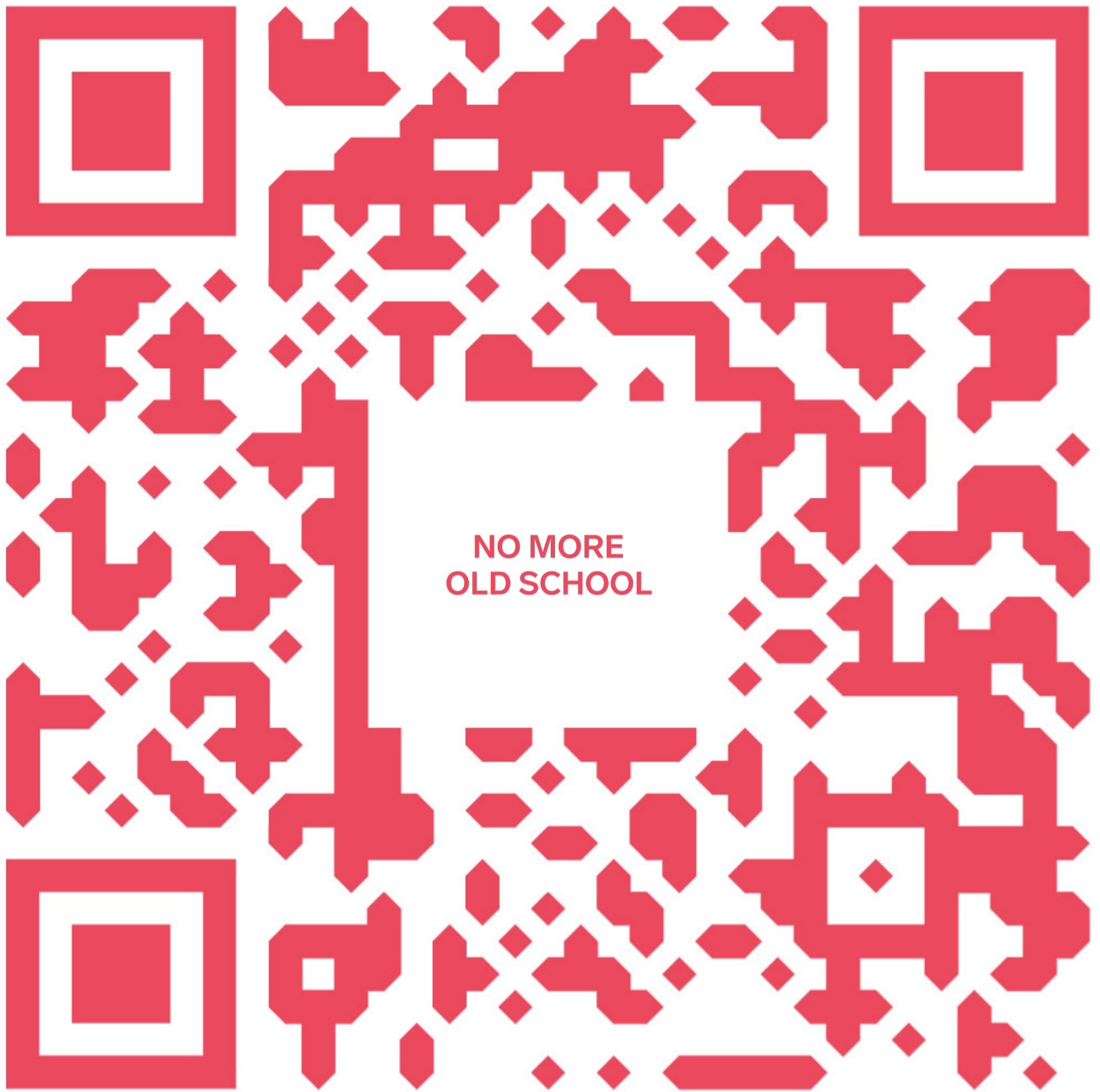
EUROPE'S COMING WINTER PERIL







LOUIS VUITTON



NO MORE
OLD SCHOOL



#ModernMBA



On the cover

A bitter energy crisis is in prospect. Europe needs to act: leader, page 9. How to prepare for a cut-off of Russian gas, page 19. Can Deutschland AG cope? Page 56. Rosneft: Schumpeter, page 59

The Democrats pass peak progressive For the good of America, the governing party must take on its own activists: leader, page 10, and briefing, page 16. Critical race theory has been weaponised, page 33

After Abe Japan should stay true to the vision of its greatest post-war prime minister—up to a point: leader, page 11. How Abe Shinzo's policies live on, page 43 and page 65. His powerful diplomacy: Banyan, page 46. Obituary, page 78

Post-quantum solace A future-proof way to encrypt sensitive data is available. Put it to use: leader, page 12. A new type of cryptography aims to blunt quantum computers' edge, page 67

Let Catholic priests wed Scrapping celibacy would help recruit clerics who don't abuse children: leader, page 13. As reformers call for change, talk of schism is in the air, page 51

→ The digital element of your subscription means that you can search our archive, read all of our daily journalism and listen to audio versions of our stories. Visit economist.com

The world this week

- 7 A summary of political and business news

Leaders

- 9 **European energy**
The coming winter peril
- 10 **American politics**
Wake up, Democrats
- 11 **Japan**
After Abe
- 11 **Government finances**
British understatement
- 12 **Cryptography**
Post-quantum solace
- 13 **Catholic sex abuse**
Let priests wed

Letters

- 14 On pumped-storage hydropower, the Republicans, sleep, corporate governance, consultants, America's national anthem, writing, moustaches

Briefing

- 16 **The Democratic Party**
Peak progressive



Bartleby Management micro-dramas: will my slides load? Are these crisps too noisy? Page 58



Europe

- 19 Winter of discontent
- 20 Ukraine's gas problems
- 21 HIMARS turns the tide
- 21 Inflation in Turkey
- 22 Angry Dutch farmers
- 23 **Charlemagne** Down with long school holidays



Britain

- 26 The Tories after Johnson
- 27 The British dream
- 28 **Bagehot** Let MPs decide



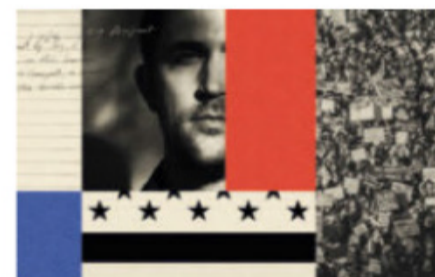
Middle East & Africa

- 29 Biden's aimless voyage
- 30 Gaza's siege generation
- 31 Cattle and conservation in Kenya
- 32 Death of a kleptocrat



United States

- 33 Critical race theory
- 36 New York's graffiti revival
- 36 Recession-spotting
- 37 Georgia loses a landmark
- 38 **Lexington** Democrats dither on abortion



The Americas

- 39 Brazil's fraught election
- 41 **Bello** Migration



Asia

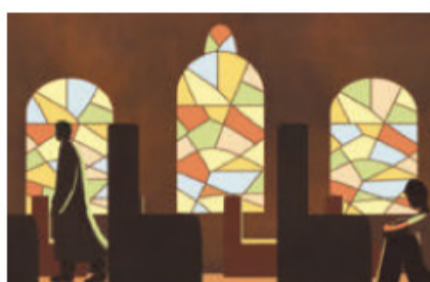
- 43 Japan's path ahead
- 44 Turmoil in Sri Lanka
- 45 Pacific island spats
- 45 South Korean politics
- 46 **Banyan** Abe's legacy

**China**

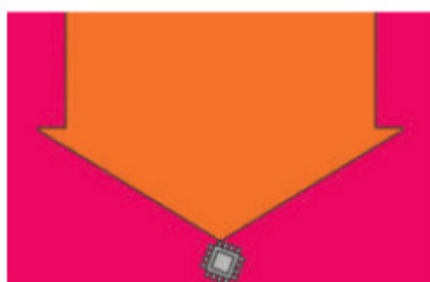
- 47 The new nationalism
- 50 Protests in Henan
- 50 How to be a "civilised" city

**International**

- 51 Stopping abuse by Catholic priests

**Business**

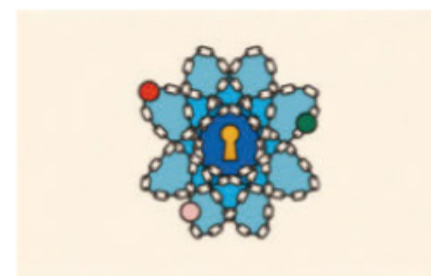
- 53 The chip downturn
- 55 Musk's Twitter storm-out
- 55 Powering up Eskom
- 56 German industry's gas shock
- 58 **Bartleby** Office hypertension
- 59 **Schumpeter** Oil's new eastern bloc

**Finance & economics**

- 61 The public-debt time-bomb
- 63 American inflation
- 63 The ECB v markets
- 64 **Buttonwood** Totally confused markets
- 65 Abenomics after Abe
- 66 **Free exchange** Monetary-policy rules

**Science & technology**

- 67 Quantum cryptography
- 68 Pictures of space
- 69 Jet fuel from bugs
- 70 Wine bottles
- 70 Elephants and cancer

**Culture**

- 71 Our summer reading
- 73 The Norman conquests
- 74 Ottessa Moshfegh's novel
- 74 Egypt's protest music
- 75 **Johnson** The rules that matter

**Economic & financial indicators**

- 76 Statistics on 42 economies

Graphic detail

- 77 The world's population pecking order is soon to change

Obituary

- 78 Abe Shinzo, promoter of a power-wielding Japan

The Economist

Volume 444 Number 9305

Published since September 1843 to take part in "a severe contest between intelligence, which presses forward, and an unworthy, timid ignorance obstructing our progress."

Editorial offices in London and also: Amsterdam, Beijing, Berlin, Brussels, Chicago, Dakar, Dallas, Dubai, Johannesburg, Madrid, Mexico City, Moscow, Mumbai, New Delhi, New York, Paris, San Francisco, São Paulo, Seoul, Shanghai, Singapore, Tokyo, Washington DC

Subscription service

For our full range of subscription offers, including digital only or print and digital bundled, visit: [Economist.com/offers](https://www.economist.com/offers)

If you are experiencing problems when trying to subscribe, please visit our Help pages at: www.economist.com/help for troubleshooting advice.

To manage your account online, please visit my.economist.com where you can also access our live chat service which is available 24/7. To call us, contact our dedicated service centre on +44 (0) 203 868 6843.

Please recycle



PEFC certified
This copy of *The Economist* is printed on paper sourced from sustainably managed forests certified by PEFC
www.pefc.org



Sri Lanka's President Gotabaya Rajapaksa fled the country after huge crowds stormed the presidential complex. Ranil Wickremesinghe, the prime minister and Mr Rajapaksa's ally, took over as acting president. The protesters, who are furious about costly food, fuel shortages and their country's economic collapse, were not appeased. A state of emergency was declared.

Crowds thronged the streets of Tokyo to mourn **Abe Shinzo**, a Japanese former prime minister, who was murdered with a home-made gun on July 8th while campaigning for an upper-house election. The assassin reportedly held a grudge against the Unification Church, from which Mr Abe had sometimes received support. The election went ahead, and Mr Abe's party won a large majority. Mr Abe had beefed up Japan's defences to counter rising Chinese assertiveness.

Pacific discord

The **Pacific Islands Forum** held its first in-person meeting since 2019, with the leaders of several Pacific-island states, Australia and New Zealand gathering in Fiji to discuss economic and security issues. The regional body has taken on more importance given China's recent security pact with the Solomon Islands and growing interest in the region. Kiribati withdrew from the forum, ostensibly in a row over its leadership. A former president of Kiribati said his successor was cooking up a deal with China.

Shanghai reopened some quarantine sites, as officials tried to contain a new outbreak

of covid-19. Residents in some areas were told to stock up on food and medicine. **Macau** also moved to curb the virus. For the first time in two years, the world's biggest gambling hub closed its casinos.

Russia cranked up the pressure on European backers of Ukraine by stopping the supply of gas through the Nord Stream 1 pipeline to **Germany**. Supposedly this is simply for ten days of essential maintenance, but Europeans fret that the pipeline might remain closed, or that Vladimir Putin might shut it off in the winter, when people need gas to heat their homes.

Ukraine claimed to have destroyed a Russian ammunition depot in the southern city of Nova Kakhovka, using its new American HIMARS rocket system. It was the latest in a string of hits on Russian facilities in occupied territory; the new missiles are extremely accurate. Russian forces in eastern Ukraine "paused" their offensive to regroup. In the south, there are signs that a Ukrainian counter-offensive is making gains.

Sepp Blatter, a former president of FIFA, **football's** world governing body, and Michel Platini, a former head of its European association, were found not guilty of fraud by a Swiss court. The case turned on a payment of SFr2m (\$2.05m) by Mr Blatter to Mr Platini in 2011 for advisory work. The court decided this was credible. Both men were banned from football in 2015.

Britain's governing Conservative Party began the process of choosing a new leader, and thus a new prime minister, after Boris Johnson's resignation. Tory MPs are whittling the field of candidates, the most diverse ever, down to two. Party members will select a winner, who will be announced on September 5th. The frontrunner is Penny Mordaunt, a socially liberal Brexiteer who once worked as a magician's assistant.

Sir Mo Farah, the holder of four Olympic gold medals for long-distance running, revealed that he had been trafficked to Britain as a child. He was taken from Djibouti by a female stranger when he was nine. She told him he was going to stay with relatives in London, but instead he was taken to a house and made to work as a domestic servant, he said. Sir Mo is a British citizen.

Not such a tough act to follow

Sir Mark Rowley was appointed as the new commissioner of **London's** Metropolitan Police. He was previously in charge of its counter-terrorism unit before retiring in 2018. Sir Mark takes over the Met following multiple scandals that led to the premature departure of Dame Cressida Dick as commissioner. Restoring public trust will be his priority.



Joe Biden visited **Israel** for the first time as America's president. Unlike previous presidents, he did not offer a plan to forge peace between Israelis and Palestinians. He was due to fly to **Saudi Arabia**, where he will discuss oil prices, among other things, with the kingdom's crown prince and de facto ruler, Muhammad bin Salman, whom he has hitherto spurned.

America said that **Iran** planned to send drones to Russia to bolster its war against Ukraine, and may also train Russians to use them. It was unclear whether any had yet been delivered.

José Eduardo dos Santos, **Angola's** president for 38 years until his ousting in 2017, died in Barcelona aged 79. He came

to office at the head of a Marxist ruling party. He won a long civil war against UNITA, a rebel movement. He plundered his country's oil wealth. Billions of dollars went missing. Half of Angolans still subsist on less than \$2 a day.

In **Brazil** a federal prison guard shot dead an official of the leftist Workers' Party. Witnesses said the killer shouted statements in support of Jair Bolsonaro, the country's populist president. Mr Bolsonaro's supporters in Congress passed a bill to let the government exceed previous limits on spending in an election year. Brazil will hold an election in October, which Mr Bolsonaro is expected to lose. Extra giveaways might help him keep his job.

Andrés Manuel López Obrador, **Mexico's** president, met Joe Biden in the White House. Mr López Obrador said his government would spend \$1.5bn to modernise Mexico's border wall with America. He also presented Mr Biden with a list of ideas for tackling inflation, one of which is to allow more legal immigration of workers.

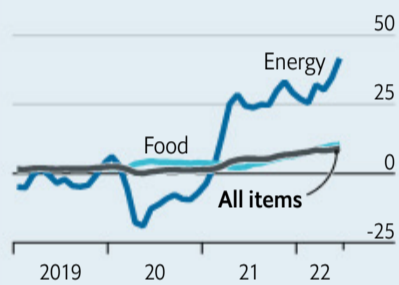
America's health department issued guidance stipulating that federal law "pre-empts" state law when an **abortion** can save the life of a pregnant woman. Mr Biden had earlier signed an order to promote access to emergency contraception and protect the privacy of women who seek information about abortions.

John Bolton, a national security adviser under Donald Trump and former State Department official, admitted that he had been involved in efforts to oust foreign governments. Asked about the storming of Congress by Trump supporters on January 6th 2021, he said, "As somebody who has helped plan coups d'état, not here but you know other places, it takes a lot of work." He suggested that Mr Trump was not up to the job of organising a putsch.

Twitter lodged a lawsuit against **Elon Musk** that seeks to force him to complete his takeover of the company for \$44bn. Mr Musk has broken off the deal, accusing Twitter of breaching their agreement by not disclosing the number of fake and spam accounts on its platform, which he insists is much higher than the company's estimate of 5%. In its suit Twitter described Mr Musk's complaints as "imaginary conditions", called his actions a mark of "disdain" and said that his "exit strategy is a model of hypocrisy". It has asked a court in Delaware to hold a hearing in September.

Consumer prices

United States, % change on a year earlier



Source: Bureau of Labour Statistics

America's annual **inflation** rate as measured by the consumer-price index leapt to 9.1% in June from 8.6% in May. The jump was bigger than had been expected by most economists and adds to pressure on the Federal Reserve to increase interest rates at a faster clip. The price of petrol rose by 11% in June over the previous month, but since then pump prices have reversed.

South Korea's central bank lifted its main interest rate by half a percentage point, to 2.25%. It was the biggest rise under a policy regime that started in 1999. The country's inflation rate is 6%. **Canada's** central bank surprised markets when it increased its rate by a full percentage point, to 2.5%.

Andrew Bailey promised that the **Bank of England** would do whatever it takes to get inflation in Britain back to a target of 2% (the annual rate stands at 9.1%). The central bank's governor suggested that this may well mean sharper increases to interest rates than

the quarter of a percentage point rises that it has implemented recently.

The **euro** briefly hit parity with the **dollar**, the first time the two currencies have been of equal value in two decades. The euro has fallen by 11% since the start of the year. The European Central Bank has been slower off the blocks than its counterparts in upping interest rates, but is expected to do so this month.

PepsiCo raised its revenue forecast for the rest of the year. The maker of snacks and soft drinks has increased the retail price of some products and shrunk the size of others to cope with rising costs, and so far has seen no tail off in consumer demand.

Stranger things

Netflix announced that it is working on a new lower-priced subscription plan that will include adverts among its content, and that it had chosen **Microsoft** to develop the technology. The company is trying to retain subscribers amid intense competition. Its rivals are also rolling out ad-supported plans, causing some to wonder if streaming platforms will come to

resemble traditional TV more closely over the next decade.

Renault's sales in the first half of the year dropped by 30% compared with the first six months of 2021. The French carmaker has pulled out of Russia, its second-biggest market, because of the war in Ukraine. Excluding the Russian business, sales still fell by 12%. Renault now sells half the vehicles it did four years ago.

Companies that lease aeroplanes have also taken a hit over the war. **SMBC Aviation Capital**, one of the world's biggest **lessors of aircraft**, recorded a \$1.6bn impairment to cover the loss of 34 jets stuck in Russia after sanctions were imposed on the country's aviation industry. Russian carriers are still using the planes and **SMBC** doubts it will get them back. Hundreds of leased planes remain in Russia, causing a legal headache for the firms that own them.

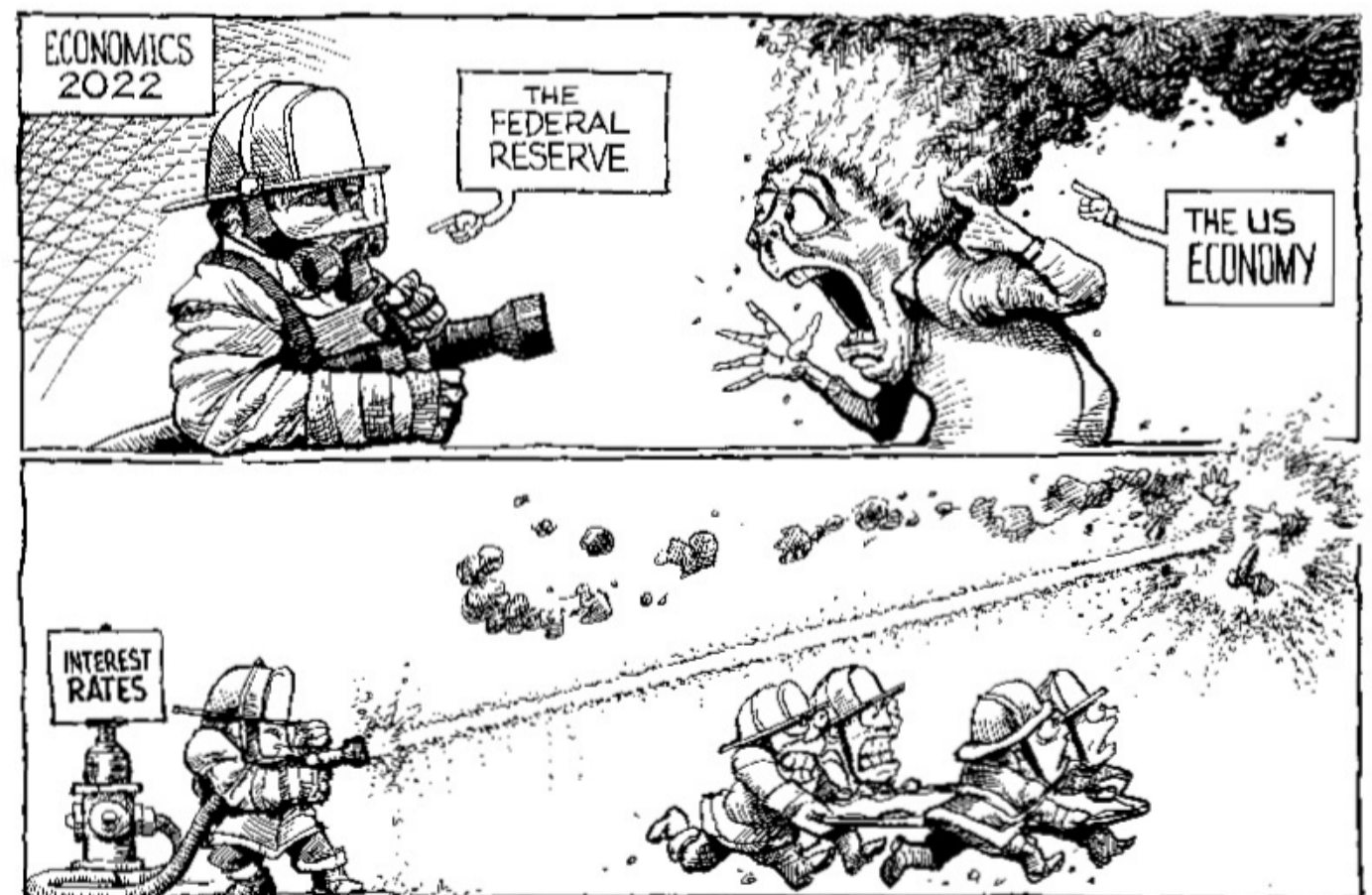
In a sign of the chaos besetting airports that are struggling to cope with a rebound in travel, **Heathrow** introduced a cap on passenger numbers of 100,000 a day and asked airlines not to sell new tickets for departures from its terminals for the rest of the summer. London's

biggest airport is a connecting hub for many international flights, including Americans holidaying in Europe.

Not ok computer

Worldwide shipments of **personal computers** declined by 12.6% in the second quarter, year on year, the steepest fall in nine years, according to **Gartner**, a consulting firm. PC sales rose during covid-19 lockdowns, but now inflation and other factors are causing households to rein in their spending. Supply-chain disruptions were also a factor, but this has mainly shifted from component shortages to logistics disruptions.

What is in a **Subway** sandwich? That meaty question has been tackled by a judge in California, who ruled that the fast-food chain could be sued for allegedly deceiving customers about the "100% tuna" used in its products. Subway argues that employees might introduce other ingredients when they handle the tuna, but the judge decided that other types of fish, and beef, chicken and pork were items that a consumer "would not reasonably expect to find in a tuna product". Subway described the lawsuit as reckless.



Europe's coming winter peril

A bitter energy crisis is in prospect. Europe needs to act now

IF YOU HAVE spent the past few days being sizzled alive on a Mediterranean beach or slow-roasted on the streets of Berlin, London or Rome amid a heatwave, cold weather may be the last thing on your mind. But make no mistake, winter is coming, and it promises to be brutal and divisive because of an energy crisis that is rapidly worsening as Vladimir Putin strangles supplies of Russian gas. Several calamities in the past decade have come close to ripping Europe apart, including the euro crisis in the early 2010s and the migrant crisis in 2015. The winter energy shock of 2022 could yet join them. Once again, the continent's unity and resolve are about to be tested.

Most Europeans cannot yet see or smell the gastastrophe, but in the markets the warning signs are already flashing red (see Europe section). Prices for delivery of gas this winter, at €182/MWh (\$184/MWh), are almost as high as in early March, after Russia invaded Ukraine, and seven times their long-run level. Governments are preparing bail-outs of crippled utilities in France and Germany, and some investors are betting on which industrial firms will go bust later this year as rationing takes hold. While most of Europe's politicians fail to level with the public about the hard choices that lie ahead, even grizzled energy traders used to wars and coups have started to sound worried.

A severe energy crisis has been a danger ever since Russian tanks rolled into Ukraine. As sanctions and Russian blackmail threaten to cut Europe from its main supplier, gas is the choke-point. It satisfies a quarter of the continent's energy demand and Russia supplies a third of that. The figures are higher for some countries, including Germany. Unlike oil and coal, which are fungible and traded globally, gas must either be piped or transported as liquefied natural gas (LNG), using facilities that take years to build or reconfigure.

As Mr Putin understands all too well, gas is also a market in which Russia holds the whip hand. Its economy would collapse without oil exports that on average have been worth 10% of its GDP over the past five years—which is why Russia has gone to extraordinary and largely successful lengths to break the Western crude embargo (see Schumpeter). But Russia can live without gas exports, which are only 2% of GDP. By turning down the taps on its pipelines, it thinks it can inflict more pain on Europe than it visits on itself.

Until a few weeks ago it seemed as if Europe might escape the worst, helped by more LNG cargoes from America and elsewhere. Gas demand is seasonal, so it is vital to build up reserves in the spring and summer. From a scary 26% in March, by June Europe's gas tanks were over half-full and on track to hit 80% by November, the minimum needed to get through winter.

Now the picture is worsening again. Glitches at a Norwegian gasfield are partly to blame, as is the hot weather which creates demand for electricity to power air-conditioning. But the big problem is the flow of gas to Europe from Gazprom, Russia's gas monopoly. It was already running at about half the normal level and has dropped even further. Russia says that since July 11th, Nord Stream 1, an important pipeline, has been undergoing

maintenance which will be completed by July 22nd. But it has not compensated by increasing supply via alternative pipelines that pass through Ukraine. Because traders think Mr Putin is deliberately squeezing supply, prices for delivery in two winters' time, in 2023-24, are four times the normal level.

Consumers, who use gas directly for heating and cooking, as well as indirectly as electricity, have little idea of what may hit them. At the moment, many are protected by price caps, subsidies and long-term contracts. The typical German pays at least 70% less than the market price for gas. Industrial users such as chemicals and glassmaking firms are in trouble, as well as a broad list of businesses, including many German champions (see Business section). Across the euro zone a halt to Russian gas flows could lower GDP growth by 3.4 percentage points and raise inflation by 2.7 percentage points, according to UBS, a bank. In Germany the hit would be still worse.

You may think a recession and inflation would be tolerable—after all, in 2020 Europe's covid-hit GDP fell by 6%. But the energy threat is more insidious. Shortages could trigger beggar-thy-neighbour behaviour as states hoard gas, stopping it from flowing on to the next country. Britain has threatened as much. Gaps in the wholesale price of gas in different EU countries suggest that firms fear a breakdown in the single market. Governments' debts are higher than ever. A stagflationary shock could raise fears of defaults or even of an Italian debt crisis that would threaten the entire euro zone (see Finance & economics section). A popular backlash over energy prices could also erode popular support across the continent for standing up to Mr Putin.

For all these reasons, European governments must rouse themselves to face the energy shock now. As with vaccines, they need to transcend national divisions. The European Commission is working on a plan to present to an emergency summit on July 26th. Given their roles in the gas trade, the plan should include Britain and Norway. Supply needs to be maximised, which is why common purchases of LNG cargoes are worth pursuing and why the Netherlands should postpone closing its Groningen gasfield next year.

Next is the need for a common hierarchy governing rationing, applied across the continent: intensive energy users should suffer first, consumers last. Countries need to share storage capacity and guarantee free movement of gas. The more integrated the system, the more resilient it will be. Last, politicians should be honest with the public. Consumer prices need to rise now in order to curtail demand and help build up storage. Help will come next winter from even small voluntary changes in household habits, such as keeping the heating lower.

The prize for Europe is not just getting through the coming months. Europe will forever free itself from Russian energy intimidation. It will also have created a coherent continent-wide energy-security mechanism that will help accelerate the shift to cleaner energy. Europe has a habit of coming together during crises. It is time to do so again. If you are reading this in Paris or Madrid with the air-conditioning on, turn it down a notch. ■



American politics

Wake up, Democrats

For the good of America, the governing party urgently needs to take on its own activists

EVERY PRESIDENT yearns to be historic—but not historic like Joe Biden. At this point in his presidency Mr Biden's singular achievement is to have the lowest approval rating of any incumbent since the 1950s. Even among Democrats, 67% think the economy is doing poorly, 78% think the country is heading in the wrong direction and 64% want another presidential candidate on the ticket in 2024.

Mr Biden took office promising to heal the soul of the nation. Eighteen months later he has little to show for his efforts. Inflation has sapped goodwill. The White House's attempts to mobilise the state, including the theory-of-everything bill known as Build Back Better, have stalled in Congress. Democrats are bracing themselves for heavy losses in mid-term elections in November, which would doom most of the administration's remaining ambitions. A gerontocratic rematch in 2024 could well see Donald Trump returned to the White House—legitimately.

This newspaper does not usually hand out advice to political parties, but America's sickly democracy requires urgent repair. A majority of Republican members of Congress have endorsed Mr Trump's attempt to steal the previous election—and many of them are likely to see themselves rewarded if the House returns to Republican control. For as long as they pander to their base by embracing Mr Trump's baleful influence even after he nearly overthrew the constitution, repair will not come from Republicans.

The Democrats therefore rightly see themselves as the only remaining guardians of America's political system. The country needs parties that actually represent voters, few of whom belong to the extremes. And yet Democrats too have fallen prey to their activists.

Fringe and sometimes dotty ideas have crept into Democratic rhetoric, peaking in the feverish summer of 2020 with a movement to “defund the police”, abolish immigration enforcement, shun capitalism, relabel women as birthing people and inject “anti-racism” into the classroom. If the Democrats are defined by their most extreme and least popular ideas, they will be handing a winning agenda of culture-war grievance to an opposition party that has yet to purge itself of the poison that makes Mr Trump unfit for office.

The Democrats have begun to put this right, but they lack urgency. That may be because some of them blame their problems on others—as when the White House points to “Putin's price hike” or the negativity of Republican politicians and the conservative media. Although there is something to this, the party also needs to ditch cherished myths that empower its idealists.

One is that a rainbow coalition of disaffected, progressive voters is just waiting to be organised to bring about a social revolution. The truth is that those who do not vote are politically disengaged and not very liberal. Some black, Hispanic and working-class voters may well see each other as rivals or have conservative views on race, immigration and crime.

Another myth is that winning over centrist voters is unnecessary, because Democrats' fortunes will be rescued by grand structural reforms to American democracy that are tantalisingly

within reach. The constitution biases the Senate and electoral college towards rural America, and thus away from Democrats. Some in the party dream of using a congressional supermajority to shift representation in Washington towards the popular vote by adding states to the union, amending the constitution or packing the Supreme Court. Yet even in better times, there is a slim chance of that actually happening.

The greatest myth is that the party's progressive stances invigorate the base and are off-putting only to the other side. Consider the governor's election in Virginia in 2021. After favouring Mr Biden by ten percentage points in 2020, voters elected a Republican whose signature campaign pledge was ridding schools of critical race theory (CRT). That concept has become a catch-all term for conservative gripes, some real and some fantastical (see United States section). Republican attacks on Democrats as out-of-touch socialists ring true to many voters in the centre.

The good news is that Democrats are showing signs of turning back from peak progressive (see Briefing). In San Francisco irate voters have recalled their district attorney as well as three school-board members whose zeal for ideological *coups de théâtre* neglected bread-and-butter problems with crime and schooling. Last year Minneapolis defeated a referendum to defund the police and New York chose a former police captain as mayor. All these causes were backed by non-white voters, including Asian-Americans in San Francisco and African-Americans in Minneapolis. Prominent Democrats running in battleground states are steering clear of the rhetoric that enthralled the party in 2020.

However, Democrats need to move faster (see Lexington). All too often, Mr Biden seems to distinguish himself from his party's worst ideas in muted tones and delicate asides. He needs to be louder and clearer in defending ideas that used to be uncontroversial: rising crime is unacceptable and the police force is needed to contain it; legal immigration is better than the illegal sort, and borders should be kept secure; the study of racism belongs in the school curriculum, social-justice praxis does not. It is not enough for Democrats to bemoan Republican disinformation. They need to counter the idea that they themselves are in thrall to their own extremes.

The bullseye is in the middle

Moving towards the centre ground would not just be a shrewd political tactic, it could also be the beginning of a cure for American democracy. The stakes could not be higher. The Republican Party has succumbed to Mr Trump's contempt for the rule of law and the true outcome of elections. For as long as the former president is poised to stand again for his old job in 2024, rebooting the Republicans will require nothing short of overwhelming electoral defeat. And that in turn requires a clearer end to the ideological drift that is jeopardising the Democrats. Standing up to the ideologues of the left will require grit, but if Mr Biden truly wants to save the soul of the nation he will have to start with the soul of his own party. ■



Japan After Abe

Japan should stay true to Abe Shinzo's vision—up to a point

MAX WEBER spoke of the contrast between politicians wedded to moral purity and their pragmatic peers. Abe Shinzo, Japan's prime minister from 2006-07 and 2012-20, was a keen reader of Weber. The tension between the competing ethics of conviction and responsibility defined his own life, which an assassin's gun cut short on July 8th (see Asia section).

Mr Abe had an ideological core. It was Abe the conservative nationalist who repelled his neighbours and polarised his country. Yet he also developed a studied pragmatism. This Abe was a realist who strengthened Japan's defences and rallied allies.

Despite Mr Abe's death Japan is likely to stick to the course he set. It will remain committed to boosting its own armed forces, reinforcing its alliance with America, and deepening its security relations in Asia and beyond. In part that is because for all his diplomatic flair, Mr Abe was responding to geopolitical shifts happening around Japan—namely America's vacillations and China's rise.

Mr Abe's central achievement was reviving Japan as a global force in its own right (see Obituary). This began with institution-building, including the creation of a national security council to streamline policymaking and the fortification of the armed forces to boost deterrence. Mr Abe also erected an architecture for the "Indo-Pacific" region, through trade pacts and groupings such as the Quad. Crucially, Mr Abe also understood that Japan's global role depends on its economic vitality at home.

Yet Mr Abe's desire to bring his country out of the shadow of the second world war and back onto the global stage sometimes meant glossing over ugly parts of its history. He fought to purge textbooks of what he saw as a "masochistic" version of Japan's colonial and wartime past. Those revisionist tendencies strained relations with South Korea, a former colony. Though Mr

Abe, to his credit, did try to resolve long-standing historical disputes, he left office in 2020 with ties severely frayed.

Kishida Fumio, Japan's current prime minister, has been quick to declare fealty to Mr Abe's hawkish legacy. But he must be careful to distinguish between the pragmatic Abe and the ideological Abe, whom he should lay to rest. Mr Kishida can begin burying the ideological Abe by working with Yoon Suk-yeol, South Korea's new president, to repair ties. He can boost his country's standing when Japan revises its national security strategy and updates its defence spending plans later this year.

Japan's ultimate aim should be to revise its pacifist post-war constitution, which prohibits it from possessing "war potential", to align with reality, which is that it maintains a large modern army. A revision would put its "Self-Defence Forces" on a solid legal footing. The debate preceding it would help Japanese voters understand that they live in a dangerous world, and need the means to defend themselves. Parties favouring revision hold the two-thirds majorities needed in both houses to put such changes to a referendum. Polls suggest the public may be more amenable than ever before.

However, unlike Mr Abe, Mr Kishida is unlikely to press hard for a vote and he may be right. The debate would be rancorous, the amendment might not pass, and if it did it would upset both South Korea and China, where nationalists constantly pretend that Japanese imperialism is about to revive (see China section). As Mr Abe acknowledged, his government's more modest legal tweaks have given Japan's armed forces the ability to deal with potential contingencies around Taiwan. Mr Kishida is therefore likely to carry on down the path Mr Abe charted, but more cautiously. If he can also lose some of his predecessor's nationalist baggage along the way, all the better. ■



Government finances

British understatement

Government budgets face a painful crunch. Tory leadership hopefuls seem oblivious

ALITTLE MORE than a decade after the Conservatives declared Britain to be on the brink of a bond-market crisis, many of the candidates to lead the party—and therefore the country—are promising to dole out plenty of cash. Tom Tugendhat wants to reverse a recent increase in national insurance, a payroll tax. Liz Truss wants to do that and cancel a planned rise in corporation tax. Penny Mordaunt, the bookies' favourite, wants to peg most tax thresholds to inflation and temporarily halve VAT on petrol.

There is still time for candidates to flesh out their plans, and none admits to throwing fiscal caution to the wind. Ms Mordaunt promises that she will get the debt-to-GDP ratio down. But none of the candidates has given a credible account of how they will finance all their giveaways. The implication is clear: most

would borrow more than planned under Boris Johnson's premiership. Given the pressure on government budgets around the world, that is worrying.

Politicians in rich countries ran up enormous debts during the pandemic and now face demands that they help the public, which is dealing with soaring energy and food prices. They must spend more on defence following Russia's invasion of Ukraine and in light of the growing threat posed by China. They have to find the cash to decarbonise their economies, a project which in Britain could raise debt-to-GDP by 20 percentage points by 2050. All the while they must contend with ageing populations demanding more spending on pensions and health care.

The trouble is that this is an especially bad time to be increas- ►►

ing government borrowing. Annual global inflation is 9.5% and interest rates are rising. Stimulating economies with unfunded spending or tax cuts would only force central banks to tighten monetary policy even more.

Inflation eases government-debt burdens, but higher interest rates will mean that governments will have to pay more to borrow. This feed-through from monetary policy to government budgets will happen much faster than markets seem to think, in part because central banks' vast bond-buying activities have left taxpayers across the rich world unusually exposed to higher rates (see Finance & economics section). Britain is no exception. Despite the fact that the weighted-average maturity of its bonds is over 15 years, higher borrowing costs will affect half of its liabilities within about two.

Some contenders for the Tory leadership have argued that inflation is solely the Bank of England's responsibility. They are sorely mistaken. Raising interest rates is effective only when fiscal policy remains sound. In a tug-of-war between hawkish central banks and spendthrift politicians, the politicians win. Just look at Brazil, which has raised rates by over 11 percentage points since March 2021 but is still suffering annual inflation of nearly 12%, in part because fiscal policy lacks long-term credibility. Margaret Thatcher, the inflation-busting prime minister whom Tories idolise, was a deficit hawk.

No rich-world country is on the precipice of a fiscal crisis—though fragile Italy will also suffer rapidly rising rates. But if pol-

iticians borrow maximally today just because the bond markets will let them, they will have less headroom tomorrow if there is a war, say, or another pandemic. To use up fiscal space is to squander insurance against the next disaster. Some Tories note that Britain has room to spend before it breaks its fiscal rules. But that claim is built on a tentative official forecast of the economic outlook. To erect the pillar of your fiscal policy on it is reckless.

And for what? Many Tories say tax cuts would unleash economic growth. In fact, because the stimulus would be offset by higher interest rates, the boost would be marginal. A pro-growth agenda would make taxation as efficient as possible, for example by shifting the tax burden from income towards land and inheritance. It would not pretend that tax is unnecessary or that tax cuts will pay for themselves.

After Johnson, an honesty test

Regrettably, Conservative leadership hopefuls are as likely to redesign the tax system as to condemn over-generous increases to public pensions, which benefit their elderly voters and are the biggest waste of the state's money. Financing tax cuts with debt would help Conservatives avoid the contradiction of calling for a smaller state when that state increasingly benefits their own supporters. The truth is that an ageing society makes it harder than ever to combine falling debts with a shrinking government and generous public services. A willingness to confront that fact is the acid test of the next prime minister's candour. ■

Cryptography

Post-quantum solace

A future-proof way to encrypt sensitive data is now available. Put it to use

HACKING AND data breaches are a cost of doing business. One defence is to use encryption, but in the fast-approaching era of quantum computers that defence will fail.

When quantum computers reach their potential, decades of secret intelligence, credit-card details, intellectual property and military and medical data will become as easy to read as the words before your eyes. The world will suffer the broadest, deepest hack in history (see Science & technology section).

Now researchers at the National Institute of Standards and Technology (NIST), America's standards agency, have shown how to avert at least some of that catastrophe. Governments, business leaders and software vendors should pay heed.

Cryptography protocols involve calculations that are harder to undo than do. For instance, it is easy to multiply two big prime numbers together, but impossibly time-consuming to get back the primes from the answer. If both sender and receiver know one of the primes, they can decrypt a message that is uncrackable to everyone else.

Quantum computers turn some of the probabilistic, simultaneously here-and-there weirdness of quantum physics into number-crunching elegance. Their powers will be limited to a smallish class of problems; it is an unfortunate coincidence that one of them is unscrambling the calculations in the defence behind which the entire digital economy has been built.

This coincidence could not be more consequential. Encrypt-

ed information is sent round the world with abandon. Be in no doubt that some is being warehoused for decryption tomorrow by malefactors awaiting a quantum-computing future. Progress towards that future is relentless, and not only because some people want to crack the internet. Pursuits ranging from machine-learning and logistics to portfolio management and drug development are ripe for a quantum boost.

No surprise, then, that some of the world's largest firms are in the race. Advances in both quantum machines and the error-

correcting and number-crunching algorithms that run on them spill out regularly. The code-cracking threshold may be some years away, but it is rapidly drawing closer. Perhaps a university laboratory will cross the line, or one of the many startups now being launched, or spooks in China or America. A breakthrough may not even make the headlines: it confers a power worth more than good PR.

Computer-scientist types have therefore been hard at work conjuring "post-quantum cryptography" (PQC) protocols: new encryption mathematics that outpaces the capabilities even of quantum machines. None has yet become a trusted standard, but now NIST has picked a set of recipes that have survived years of tyre-kicking.

The imprimatur of a world-renowned standards body should be enough to start a general shift to PQC. That should begin today, as it will take time for the new protocols to supplant the old ▶▶



► techniques. Big software vendors will pick up the bulk of the task, building the protocols into the programs and platforms they offer, and behind-the-scenes gatekeepers such as the Internet Engineering Task Force will help the spread. But smaller operations that do not truck in commercial software, such as boutique data dealers, defence contractors and the like, will also have to get their spanners out. Eventually the new standards must percolate through every device and service that transmits encrypted data—every browser tab, every nuclear facility, every payment gizmo, every military digital radio.

This is more than just a matter of bottom-covering and locking down data in danger of being hoovered up by tomorrow's quantum-enabled hackers. Given how long the transition will take (and the certainty, acquired from bitter experience, that

many will drag their feet), early adopters will enjoy an advantage. "PQC-ready" should become a selling-point.

A bit of cryptographic agility will prove advantageous in the long run, too. NIST's new standards are unlikely to be the last, as quantum computers' strengths develop and protocols are tested to destruction in the white-hat hackers' white-hot heat. Organisations should learn how to become nimble now so that they can slot in new equations later.

For decades the security-minded had little need to worry about cryptographic protocols, which were the best defence within the only existing computer architecture. Now that old architecture has a rival. Most who implement PQC will not see any difference, and have no need to fuss with the 600-digit numbers in use today. They should, however, sleep a little easier. ■

Catholic sex abuse

Let priests wed

Scrapping the celibacy rule would make it easier to recruit clerics who don't abuse children

THE POPE is not in the habit of taking advice from newspapers. After all, the Roman Catholic Church takes instruction from the creator of the universe. Nonetheless, Pope Francis has opened up a process whereby all 1.4bn Catholics can have a say about the future of the faith. If they want to reduce the scourge of sexual abuse by priests, they should demand an end to the rule requiring priestly celibacy.

Were this just a theological question, *The Economist* would take no view. But it is not. In parish after parish, school after school, diocese after diocese, Catholic priests have abused children. America, Australia, France, Germany and Ireland, among others, have undertaken reckonings. The number of victims in France alone was estimated at 216,000 in the 70 years to 2020. Now countries such as Poland, Portugal and Spain are investigating, too. Catholic sex abuse involves not only bad apples, but a rotting orchard (see International section).

Further revelations are inevitable. The scale of abuse against adults, including nuns, is starting to be reported. Investigations have barely even begun in poor countries into what might have happened in 9,000-odd residential Catholic institutions, including orphanages. Even in rich countries where criminal-justice systems are well-resourced, investigations have been thwarted by an ancient institution's reflexive secrecy.

Some of the church's failings are common to other organisations. When a few people are given power over others, when checks on that power are weak and when victims lack effective channels to report abuse, predators will take advantage; witness the recent reckoning in Hollywood. If, furthermore, an institution routinely hushes up allegations and shuffles suspected predators to other jobs, rather than promptly reporting allegations to the police, abuse thrives. The church is working to correct these failings. But that will not be enough.

Requiring priests to be celibate dramatically reduces the pool from which they can be recruited. For many people, no matter how pious, renouncing sex, romance and the chance to start a family is too great a sacrifice. One group for whom such a rule imposes little extra burden, however, is paedophiles. Society re-

quires them to suppress their urges. Many already try to be celibate, or pretend to be so.

Some become priests sincerely hoping that a spiritual life will help them resist temptation. Others no doubt do so precisely because the priesthood offers opportunities to abuse. Either way, the church has done a poor job of winnowing out those who pose a danger to their flock. Some argue that it has also done a poor job of preparing priests for the stress of a sexless life. Estimates from around the world, from a variety of scholars, have found that 6-9% of priests and members of celibate orders, such as monks, may be abusers. Statistics on the general population are hard to pin down, but Britain's National Crime Agency estimated that 1-3% of adult men have urges to abuse children; a much smaller share act on their urges.

The Vatican says that Jesus remained celibate, and so should

his servants on Earth. Though some parts of the Bible praise celibacy, nothing in the gospels requires all clergy to embrace it. Before the 11th century, the Roman Catholic Church did not insist on it. The rule was introduced partly for financial reasons: clergy without children were more likely to leave their assets to the church. Today, many Eastern-rite Catholic churches let their clergy marry before taking holy orders.

Strikingly, these churches have low levels of reported sexual abuse of children.

Protestant denominations show that married clergy can successfully tend to both their family and their flock—indeed, marriage may bring priests closer to their parishioners. That would weaken the idea that clerics are an untouchable group apart, which many researchers see as contributing to abuse.

The church is desperately short of priests. In its heartlands it is losing followers, not least because many no longer trust an institution that has sheltered abusers. If the church stopped requiring priests to be celibate (or male, for that matter), it could recruit from a much larger pool. If it also monitored them better and acted faster, fewer people would be abused. Whether that would slow the pace at which the faithful are leaving the church is hard to say. Regardless, it would be a blessing. ■



Pumped-storage hydropower

I was glad to see you note the vital role of long-duration energy storage (LDES) in decarbonising grids (Technology quarterly, June 25th). I call this the ignored crisis within the crisis. As you say, almost all LDES globally is provided by one technology: pumped-storage hydropower (PSH). When I was prime minister of Australia I commissioned the Snowy Hydro 2.0 Pumped Storage Facility to tackle blackouts in South Australia. I learned a lot about the technology, and I was surprised to read industry estimates of only a 50% increase in PSH over the next decade. Happily, that is an underestimate. China alone has plans to quadruple its installed capacity, to 120 gigawatts by 2030.

Moreover, a study by the Australian National University identified up to 600,000 potential sites for off-river pumped-storage hydropower, which, as the name suggests, does not need an ongoing connection to a river system. It has the potential to provide up to 23,000 terawatt-hours of storage, more than enough to support a 100% renewable global electricity system.

The key barrier to its global deployment is a lack of appropriate market mechanisms of the type that have enabled wind and solar to be installed at scale. The truth is that we already have all the technologies we need to deliver 100% decarbonised grids. What we need is the political will.

MALCOLM TURNBULL
Board member
International Hydropower Association
Sydney

Too little, too late

I appreciate that Lexington has at least gone so far as to admit that the Republican Party may be unreformable, but I must disagree that there is any real courage among those who finally testified before the January 6th committee (July 2nd). Cassidy Hutchinson did not come forward voluntarily

but was compelled by a subpoena like all the others who have testified. The kindest interpretation is that after her subpoena in November 2021, she at last decided to do her duty by the oath she took as a public employee.

More realistically, she saw her choice as between resisting the subpoena, lying under oath or testifying, and decided that her former Trump-connected lawyers were ready to sacrifice her or take her down. A 25-year-old junior staffer should not be subjected to the same condemnation reserved for senior Republicans like Bill Barr and Bill Stepien; they knew where the administration was heading with the Big Lie, did not step up in public to stop it, and to this day continue to work for those who propagate it. But I'm sorry, there is no heroism here. Only two Republicans voted to have this committee and not one voted to protect federal elections from gerrymandering and state interference. The Republicans can no longer be trusted in power at any level.

RICHARD SMITH
Newton, Massachusetts

Early to bed...

Your correspondent reports that California has decided that public high schools should start 30 minutes later at 8.30am ("Snoozzzzzze on", June 25th). Evidently this will lead to high-schoolers getting more sleep and being healthier. It would be simpler if teenagers went to bed earlier, and with their phones off.

TERENCE MILLS
Quarry Hill, Australia

Unravelling the code

Your leader on Britain's growth crisis cited the country's "baroque governance code" as an obstacle to growth in general ("Tiddlers, not titans", June 25th). The UK Corporate Governance Code's strictures probably do deter some listings on the London Stock Exchange, but it suffers from other serious shortcomings. Numerous measures duplicate

requirements that are regulatorily mandated elsewhere, and others do little more than confirm corporate common sense. In addition, the code has increasingly taken on a misguided stakeholder focus. Compliance is contingent upon shareholder oversight and there is only so far that shareholders will go in promoting the interests of non-shareholder stakeholders. A strong case can be made for abolishing outright what was an innovative corporate-governance document.

BRIAN CHEFFINS
Professor of corporate law
University of Cambridge

Accountants v consultants

Schumpeter wrote about the planned spin-off of EY's consulting arm (June 25th). This has happened before. In 2000 Ernst & Young (as it was known then) spun off its American consultants to Cap Gemini. The situation was similar in that consulting made up two-thirds of the firm's profit then, too.

The accounting partners remained partners with partner-level incomes. Meanwhile, virtually all of us in consulting were pushed out or left within four years as cost cutting by Cap Gemini reduced our salaries and opportunities substantially. The former consulting partners who received Cap Gemini stock grants as their pay-off had to pay tax bills based on 2000 stock valuations. Stock sales over the next five years were worth half what they were in 2000 because of a drop in the market. It was a windfall for the bean-counters paid for by the consultants who generated the windfall. This time will be no different.

STEPHEN RUGER
Baltimore

American vision song contest

Far from being "the perfect song for America", "The Star-Spangled Banner" rankles as a war tune extolling destructive explosions at an obscure battle ("Proof through the night", June 25th). A more

appropriate song for a national anthem would be positive and constructive, such as "This Land is Your Land". Or how about "America the Beautiful" or "America (My Country 'Tis of Thee)".

Enough war, enough bursting bombs.
PROFESSOR EMERITUS
LEON KENMAN
Bethesda, Maryland

The write stuff

The availability of writing material also played a part in the development of writing (Johnson, July 2nd). It is no accident that parts of the world with relatively abundant access to water, sand, rocks, or clay, and reeds, wood, or metal, lent themselves more to developing a lasting system of shared symbols.

It is worth noting how the Germanic Runic script, carved on stone or wood, consists of arrangements of straight lines. They are necessarily hard cuts into hard materials. By contrast the Burmese script is entirely curved, as it relied on palm leaves or other, less durable material which could not handle straight cuts without breaking.

Simon Ager runs an excellent, long-standing website called Omniglot.com that is a good compendium and history of the world's writing systems.
NAREG SEFERIAN
Yerevan, Armenia

A tash gives you panache

Certainly the moustache has been much loved in earlier times ("The great moustache comeback", July 2nd). I recall a colleague recounting how an aunt had told her in the 1930s that kissing a man without a moustache was like eating an egg with no salt.

JEREMY MOON
Copenhagen

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)

A New Challenge?

Unique Access to Confidential Opportunities

InterExec is the global leader in assisting Top Executives to access £200k to £2m+ unadvertised vacancies worldwide.

We act discreetly through our 15,000 strong headhunter network.

london@interexec.net www.interexec.net +44 (0)20 7256 5085

InterExec
UNIQUE NETWORK ♦ OUTSTANDING TALENT

Jane Leighton
BEFORE CREATIVE INDUSTRIES
NOW MATHS TEACHER

ARE YOU READY FOR A CHANGE?

Come back to school
nowteach.org.uk

NOWTEACH

#ESArecruits

Director of Technology, Engineering and Quality

The post will be based at the European Space Research and Technology Centre (ESTEC Noordwijk, Netherlands) with regular presence at ESA Headquarters (Paris).

The European Space Agency (ESA) is Europe's gateway to space. Its mission is to shape the development of Europe's space capability and ensure that investment in space continues to deliver benefits to the citizens of Europe and the world.

The Director of Technology, Engineering and Quality is **responsible for defining, executing and providing technical support** to all ESA activities and to Europe's space industry through specialised manpower and laboratory facilities. The Director is also responsible for implementing R&D activities from the Agency's technology programmes, as well as for technology transfer. In addition, responsibility for Quality Management for the Agency and its products lies with the Director of Technology, Engineering and Quality.

We are looking for candidates with a minimum of a master's degree in a technical or scientific subject, solid experience in management and a strong technical background.

Experience in the field of space activities, preferably acquired in an international setting, and with industry, will be an important asset.

The detailed job profile and requirements are available at esa.int/careers

Applications should be addressed, in the form of a cover letter and CV, to the Head of the Human Resources Department and submitted at the e-mail address: directorsrecruitment@esa.int by 28 July 2022.

ESA is an equal opportunity employer, committed to achieving diversity within the workforce and creating an inclusive working environment. For this purpose, we welcome applications from all qualified candidates irrespective of gender, sexual orientation, ethnicity, beliefs, age, disability or other characteristics. Applications from women are encouraged.



Peak progressive

WASHINGTON, DC

Democrats are realising that they must moderate or die

PERHAPS NO PLACE has been a haven for counter-culture quite like San Francisco. The Bay Area has hosted psychedelic enthusiasts, beat writers and gay-rights activists. Now another variety of counter-culture may have sprung up in the city. Unexpectedly for the epicentre of leftism in America, however, it is one of mass discontent with progressive excesses.

In February, San Franciscans took the remarkable step of recalling three members of the local board of education who resembled a caricature of wokeness. Despite keeping schools closed for an exceptionally long period, thus harming the least-advantaged children, the board found time to recommend renaming 44 closed schools—including those named after Abraham Lincoln and George Washington—on social-justice grounds. Then on June 7th, Chesa Boudin, the progressive district attorney of San Francisco, lost his own recall election. Mr Boudin's compassion for the incarcerated and calls for less punitive punishment were not too radical for the city three years ago. By 2022 that had changed, amid a nationwide rise in homicides and local

disaffection over petty crime, open-air drug taking and homelessness.

London Breed, the city's moderate-leaning mayor, has begun forcefully arguing for more police—not fewer, as was once vogueish in progressive circles. “The reign of criminals who are destroying our city, it is time for it to come to an end,” she said in December. “And it comes to an end when we take the steps to be more aggressive with law enforcement...and less tolerant of all the bullshit that has destroyed our city.”

Look elsewhere in America, and a similar backlash is emerging. On matters like crime, immigration and schooling, voters—even in left-leaning cities—are eschewing progressive slogans and policies that came to prominence in the fervid summer of 2020 when George Floyd was murdered, covid-19 was raging and Democrats were dreaming of a Rooseveltian transformation of America.

These are all signs that Democrats are passing peak progressive. The calls are not just coming from within cities, but from working-class and non-white voters—the ostensible beneficiaries of progressive

policies. Many expanded redistribution programmes are popular. But the ambitions of the Biden administration have been deflated by the realities of governance. A premature learned helplessness seems to have already cast a pall over its congressional leaders. The reality is setting in that the party faces serious losses in the mid-term elections which will cripple the chance for meaningful legislation.

Amazingly, it will probably lose to a party that still embraces Donald Trump despite his attempt to subvert democracy, as the ongoing hearings from the January 6th congressional committee have forensically detailed. The Republican Party has articulated no political agenda other than grievance. That means that the Republican message is relatively simple to express: that Democrats are economically incompetent socialists who are trying to open borders, demonise police, indoctrinate children and ruin America. That message will probably win in 2022. It could even carry Mr Trump back into the White House in 2024. Suddenly the clamours for a course correction start to make sense.

Slam it to the left

The drift of the Democratic Party towards its progressive faction has been apparent for a long time. Joe Biden, whose personal policies have shifted with the party's political winds for decades, is as good a weathervane as any. The lifelong moderate, who once decried mandatory busing to integrate schools in the 1970s and enthusi-

▶ astically supported welfare reform and tough-on-crime policies in the 1990s, reversed himself completely and ran well to the left of Barack Obama in 2020. Yet he was still the relative moderate of the primary field. That shift registers on political scientists' seismographs, too. Data from the Manifesto Project, a corpus of political-party platforms from 50 countries, show that the Democratic Party platform has moved substantially to the left since 2008—shifting from the centre-right to catch up with left-wing parties in Europe like Britain's Labour and France's Socialist Party (see chart 1).

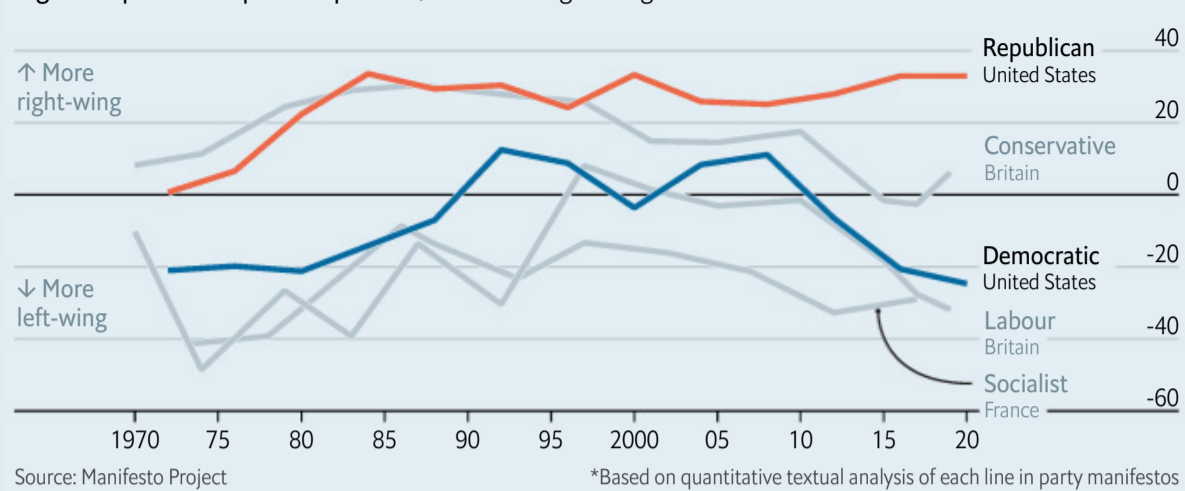
"We are winning the battle of ideas, but we are not winning the battle of execution," says Ro Khanna, a progressive congressman from California who co-chaired Bernie Sanders's campaign in 2020. He notes that a minimum wage of \$15 an hour was once contentious within the party. Now it is uncontroversial. "We passed that out of the House, but it hasn't passed out of the Senate." A number of progressive goals on taxation, unionisation and protecting the right to abortion have suffered the same fate, Mr Khanna observes. They were all passed in the House of Representatives, only to die ignominiously in the Senate because of the presence of conservative Democrats and the filibuster, a parliamentary hurdle that currently requires the support of ten Republicans to advance most kinds of legislation.

For further proof, look only at the scope of Build Back Better—Mr Biden's signature legislative proposal which would have spent \$4trn to mitigate climate change and create new social-welfare programmes partially balanced with higher taxes on the wealthy and corporations. It was the sum total of almost all progressive hopes and dreams. But, after months of negotiations, it came apart after Joe Manchin, a Democratic senator from West Virginia, rejected it. Something much more modest is currently being scraped together from its ashes, which may or may not pass before the mid-term elections.

Even getting this far is a remarkable coup for a small faction of the party. Progressives—the highly engaged, highly educated voters with very liberal views on race, immigration and economic policy—make up only 12% of Democrats, according to a dissection of political typology done by the Pew Research Centre. Nearly 70% are white, the least racially diverse of any of the other groups. They are very unlike other Democrats. Fully 60% think favourably of democratic socialists (see chart 2 overleaf). And consciousness of systemic racism is a powerful organising principle: 76% agree that "white people benefit a great deal from advantages that black people do not have"—the most of any Democratic-leaning group.

What's left

Right-left position of political parties*, 100=most right-wing



Despite their size, the ideas of progressive Democrats have had an outsize influence over the trajectory of policy—and the party's external perception. There are a few reasons for this. Understandable disaffection with inequality, added to frustration with leaders such as Mr Obama and Hillary Clinton (who were derided as neo-liberals), led young voters to embrace populist figures like Mr Sanders and Elizabeth Warren. Progressives are highly over-represented among the young meritocratic elite who stuff campaign offices, advocacy groups and media outfits.

Shake it to the right

Since 2018 the celebrity status given to Alexandria Ocasio-Cortez, one of the champions of the movement, and a group of like-minded legislators known as "the Squad" has, for better and worse, raised the profile of their ideas—such as "abolish ICE", "defund the police", "democratic socialism", "a Green New Deal", "Medicare for all". The ten sitting House members of the Justice Democrats, a progressive super-

group that includes the Squad (a bit like the Avengers), all represent lopsidedly blue districts: in 2020 they went for Mr Biden by a margin of 75% to 24%.

Democrats have been here before. In 1989, soon after Republicans had won a third consecutive presidential election, two political scientists, William Galston and Elaine Kamarck, wrote an essay titled "The Politics of Evasion". Democrats then were dodging their fundamental problems by embracing several delusions, they wrote. The first is the belief that they "have failed because they have strayed from the true and pure faith of their ancestors". This was "the myth of liberal fundamentalism". The second is the belief that Democrats need not alter public perceptions of their party but can regain the presidency by getting current non-participants to vote—"the myth of mobilisation". The third is the belief that there is "nothing fundamentally wrong with the Democratic Party".

That hope for an ascendant progressive majority just beyond the next election is resurgent again. So much so that this year Mr Galston and Ms Kamarck released another study called "The New Politics of Evasion". "We're all living in fear of what the progressives might do to screw up this moment," says Ms Kamarck. Their messaging has been disastrous for the party as a whole, she says. "And you know, some of them don't care. Some of them work on the theory that it is better to lose now, go down fighting and come back? Well, there's no goddamn comeback."

It is perhaps no surprise that the backlash would start in cities, where noble ideas must clash with daily reality. "San Franciscans in general are progressive at heart...but once you start implanting these things at a local level, you have to do it correctly," says Mary Jung, a former chair of the San Francisco Democratic Party who led the recall campaign against Mr Boudin. Ms Jung recalls being alarmed after having lunch with a woman recently released after a light sentence for murdering her father and dismembering his body. Similar stor-



ies doomed Mr Boudin's efforts to keep his job, including one of a man arrested four times without charge before eventually killing two pedestrians while driving a stolen car intoxicated.

The progressive school-board members brushed off the mounting evidence of learning loss among pupils and even tried to rebrand it as "learning change". "I think the school-closure situation was something that exposed the real lack of values within the progressive movement in San Francisco," says Siva Raj, who helped run the recall campaign. "There is so much focus on performative bullshit and very little focus on actually delivering outcomes."

One of the most influential organisers for the campaign was Kit Lam, a former anti-corruption officer from Hong Kong, whose children suffered from remote learning. Mr Lam found that many Chinese-speaking parents were irate that the board eliminated selective admissions to Lowell High School, the city's best secondary school, because it allegedly "perpetuates the culture of white supremacy and racial abuse towards Black and Latinx students". Mr Lam asks, "What is it now? Merit is racist? Doing mathematics is racist?"

Those grassroots concerns ultimately could not be papered over with appeals to equity or other progressive values. "They were trying to make people believe that what they were seeing with their own eyes wasn't real. And that's just no way to govern in a democracy. It's gaslighting," says Rafael Mandelman, a member of the San Francisco board of supervisors.

Parallels can be seen in other places, too. One year after Floyd's murder, voters in Minneapolis defeated a referendum to eliminate the police department and replace it with a new department of public safety. City councillors in Austin, Texas, cut the police budget by one-third in 2020, then scrambled to add funding later as homicides spiked. In New York City, voters passed over many progressive champions to elect Eric Adams, a showboating former police captain, as their next mayor. Liberal-leaning suburbanites helped Mr Biden win the state of Virginia by ten points in 2020. Just one year later, fears that schools were being overrun by progressive indoctrination led them to elect Glenn Youngkin, a Republican, as governor.

Erstwhile progressive icons are talking differently. Stacey Abrams is running again to be governor of Georgia on a platform of raising salaries for law-enforcement officers. In his bid to be governor of Texas, Beto O'Rourke, who during his presidential run in 2020 pitched a plan to spend \$5trn fighting climate change, is now endorsing oil and gas production in the state, saying critical race theory should not be taught in schools and criticising Mr Biden's border policy. Others also seem to grasp that the

path in a difficult election year is to moderate or to die. The president himself has shifted, the weathervane twisting with the winds, by making more frequent pronouncements that police should be funded, borders should be secured and that energy production should be boosted to reduce petrol prices.

That may not be enough to quell the damage. In theory, a muscular progressive agenda of bigger social-welfare benefits and public-jobs programmes should be winning over the working class. Instead they have been defecting to the Republicans for nearly a decade. While this erosion has been widely noticed among whites without college degrees, the same trend is wreaking havoc among Hispanic and black voters, many of them socially conservative. Rather than the Democratic Party wooing economically marginalised people of colour and marshalling them to lead the progressive revolution, the proletariat is being lost.

Spice up your life

The warning signs are flashing brightest for Hispanic voters, who were supposed to be the key to the permanent Democratic majority of the future. Between 2016 and 2020, Mr Trump improved his margins among Hispanic voters by a remarkable eight points, the largest shift among any major ethnic group. A hardline immigration policy and the campaign to build a wall hardly deterred Hispanic voters in border states like Texas and Florida, which swung even more strongly Republican.

It is a troubling sign that—even when polled after Trump supporters had stormed the Capitol on January 6th 2020—more Hispanic voters say that they are more concerned with Democrats embracing socialism and leftist policies than they

are with Republicans embracing fascist, anti-democratic policies.

The progressive rejoinder is that they are on the very cusp of achieving their aims. Although they have quietly left behind many of their culture-war maxims—to the point that none of the new candidates endorsed by the Justice Democrats even mention defunding the police on their campaign websites—they think their economic prescriptions are durable. "The narrative has shifted about what people deserve in America. And I think 99.9% of Democrats are with us. There's one Democrat in the Senate that wasn't with us," says Pramila Jayapal, a congresswoman who chairs the influential Congressional Progressive Caucus, referring to Mr Manchin. She, like many, still sees the alienation as a result of economics, not culture. Embracing free trade was, she says, "the beginning of...the losing of the working class." She thinks they can be won back. "I just think we have to really push forward with some of these populist policies."

With just one or two more Democrats in the Senate, progressives hope to blast away the filibuster and then enact other permanent structural reforms. "The return to normalcy and institutionalism of the current structure will not produce bold, progressive outcomes," argues Mr Khanna, the progressive congressman from California. "The reason is that there are some anti-democratic structures within our political system: the filibuster, gerrymandering and massive amounts of money allowed into the political process."

Ever since Mr Obama assembled his multiracial coalition in 2008 and won overwhelming congressional majorities, Democrats have been trying to build it back. It did not work out that way in 2016, and it does not appear to have worked in 2020, either. The theory that legislative results would speak for themselves has not been borne out—whether for Mr Obama's Affordable Care Act or for Mr Biden's passage of a gargantuan stimulus called the American Rescue Plan that may have unhelpfully hastened inflation.

The possibility of a humiliating loss to a Republican Party that is unrepentantly descending into anti-democratic conspiracy and that lacks a coherent policy agenda weighs heavily on Democrats and anxious international allies. Given the sorry state of Mr Biden's approval ratings—by some measures, the worst at this point of a first term of any president since the 1950s—and woeful perceptions of the economy, it is unlikely that the tentative steps that Democrats are taking back towards the median voter will be enough to avert the serious electoral losses that they are facing. It is only after a serious drubbing that the descent from peak progressive will gain speed. Better it be in 2022 than in 2024. ■





Europe's energy

Winter is coming

Europe is preparing for a possible cut-off of Russian gas

“SOCIAL PEACE in Germany is being challenged,” declared Robert Habeck, Germany’s vice-chancellor, on July 7th. The villain: natural-gas prices. Russia is throttling Europe’s supplies in revenge for its support for Ukraine. In Germany, which relies on Russia for around one-third of its gas imports, energy bills are expected to soar. Gas prices will cause firms huge losses; ultimately, Mr Habeck fears, they could trigger a financial meltdown. The ultimate threat—a complete Russian cut-off—looks ever more plausible.

Gazprom, Russia’s state-controlled gas goliath, has been squeezing the Europeans for months. s&P Global, a research firm, reckons that in June Russia piped just 4.7bn cubic metres (bcm) to Europe, barely a third of the level in early 2021 (see chart). The biggest gas flows come via Nord Stream 1 (NS1), which links Russia to Germany via the Baltic sea. (Nord Stream 2, a new pipeline on the same route, was denied approval by Germany as punishment for Russia’s aggression.)

Now Russia is squeezing even harder. On June 16th it slashed exports via NS1 to

40% of capacity, citing technical snags. Big European buyers such as Italy’s Eni, Austria’s OMV and Germany’s Uniper were hit hard: they must make up the shortfall by buying pricey gas on the spot market.

On the morning of July 11th Russia shut down all gas exports via NS1 for about ten days of maintenance. A vital turbine does need fixing, and Siemens Energy, its manufacturer, had shipped it to Canada for repair. But because of Canadian sanctions, it was reluctant to send the turbine back to Russia. Mr Habeck urged Canada to release the kit to Germany, sidestepping the sanctions, to “take this turbine excuse away from Putin”. On July 9th Canada relented.

→ Also in this section

20 Ukraine’s gas problems

21 HIMARS turns the tide

21 Triple-digit inflation in Turkey

22 How many cows are too many?

23 Charlemagne: No long holidays!

The European Commission wants to organise an EU response to any attempt by Mr Putin to cut supplies again this winter, not least to avoid the sort of beggar-thy-neighbour policies which member states pursued when covid first hit. “We need to make sure that in case of full disruption, the gas flows towards where it’s needed most,” said Ursula von der Leyen, president of the commission, on July 6th. Her plan should be announced by July 20th. A ministerial meeting on energy security is expected later this month.

Preparing for a shock

The response has four pillars: boosting gas-storage levels, diversifying energy sources, encouraging demand reduction, and rationing. The most important is storage. Last year many firms refused to buy gas at prices inflated by Russian manipulation. Levels in storage tanks became precariously low, but mild weather saved Europe. This year, a plan passed by the European Parliament mandates a minimum 80% fill-rate for gas storage by November 1st, rising to 90% in future years.

The good news is that the EU’s tanks are now almost 60% full, with about 60bcm stored, up from some 50bcm a year ago. Before the shutdown of NS1, Michael Stoppard of s&P Global reckons the EU was on track to “reach and exceed” the 80% goal by November 1st. New modelling by a group of German think-tanks led by the Kiel Institute suggests that Germany could cope this winter even if Russia cut off all gas in July. ▶▶

► In April, when less was in storage, it thought that this would be impossible.

But not all countries have stored gas equally. Those at or below 50% today (Bulgaria, Romania and Hungary are laggards) would suffer badly in a cut-off, and all would suffer if winter is abnormally cold. Mr Stoppard reckons that a cold winter could add up to 25bcm of extra demand. Even countries that scraped by would be in a terrible position come spring.

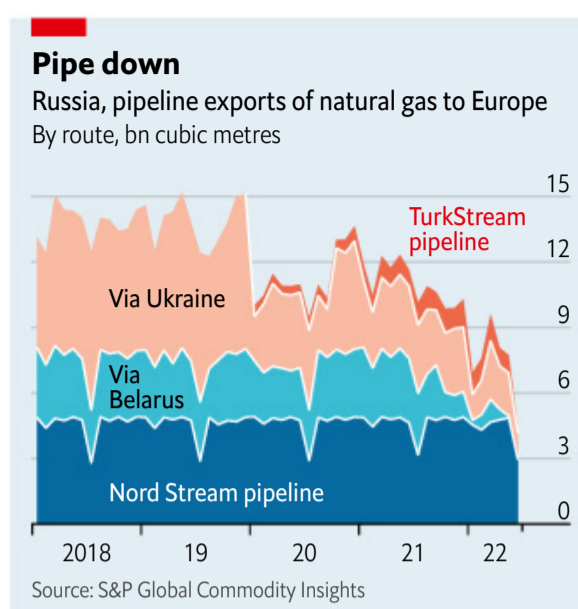
As for alternative energy supplies, liquefied natural gas (LNG) imports have surged dramatically. High European prices have lured tankers away from Asia. Morgan Stanley, a bank, thinks some 41bcm of LNG entered Europe in the first quarter, up 70% year on year. Nearly 30% of the world's exported LNG has gone to Europe lately, up from below 20% in 2021.

Whether this can be sustained is an open question. Europe has already sucked up so much of the world's LNG that can be redirected away from Asia that there is now not enough left to cover a complete Russian cut-off—especially if China's economy recovers from its covid lockdowns. Meanwhile, LNG cannot reach Germany directly because it has no regasification facilities. It has acquired floating regasification ships for which Mr Habeck's government is fast-tracking approval. But they are unlikely to be up and running till early 2023, reckons Jaime Concha of Energy Intelligence Group, an industry publisher. Ironically, in the three months after the invasion, some 15% of the LNG entering Europe to replace piped Russian gas also came from Russia, notes Mr Stoppard. He estimates Russia has earned nearly \$400m a day of late from sales of piped and frozen gas to Europe.

The EU's medium-term plan is to scale up wind, solar and green hydrogen as energy sources, so that they more than replace Russian gas imports. But that will not solve an imminent cut-off. And to the chagrin of greens, filthy coal is on hand now. With Eurocrats' blessing, member states including the Netherlands and Germany are issuing environmental waivers for coal plants to crank out more power.

Then comes the demand-side response. High gas prices have already acted to reduce some demand. Leslie Palti-Guzman of Leviaton, an energy-data firm, estimates that industrial consumption in Europe has dropped by roughly 8bcm per month in the past three months. German industry, which depends on cheap gas and accounts for 37% of the country's total use, will be hit hard, she thinks.

Finally there is rationing of energy. Germany talks openly about this dread prospect, but most countries have shunned it. Now the commission is preparing a "crisis-management framework". Plans already exist for helping neighbours in a brief



emergency, but not for one that could be region-wide and last for months. Under one proposal, the commission would coordinate gas-demand reductions in all member states. Beyond protecting hospitals and grannies, different countries have different priorities; one might refuse to send its gas to help a neighbour meet needs it does not consider urgent. Without a harmonised scheme, says one insider, "we'll have a complete halt of a single market within a few months." ■

Ukraine's winter

Cold front

KYIV AND OKHTYRKA

The war is creating unique challenges for Ukraine's energy planners

A STEEL RAIL protruding from an ash tree is a grim memorial to five workers killed in a Russian air-raid on Okhtyrka power station in March. No one is sure where the bit of metal came from. The bombs left little for forensics. Three victims were never found at all; one of the bodies that was recovered had to be buried without a head. To this day, the power station lies largely in ruins. The boiler room is now several feet underground. The pipes that once fed gas into it have been shredded. But the plant's director, Grigory Yurko, is at work on a Sunday, overseeing building work he says will eventually bring it back to life. Mr Yurko, who fought for the Soviet Union during its occupation of Afghanistan, says there is no alternative if he is to heat 10,000 apartments through the winter: "The town will die without us."

Securing reliable energy to warm Ukrainian homes has never been easy. But the ruins in Okhtyrka, a north-eastern city that resisted the Russian invasion, underline the unique challenges now facing planners. Although winter is still four months

away, it is not at all clear how much energy will be needed, or how much can be supplied. Part of the country remains under occupation. Another part is under fire. One-third of the country's coal supplies are unavailable. Gas production is down by only around 5-10%, but almost all of it is located close to the front lines. It is widely assumed that Russia will step up its attacks on the most sensitive points: compressor stations, power stations, substations. For some reason, it has not routinely targeted such infrastructure so far. Okhtyrka shows what can happen when it does.

"It's very difficult to model the risks, and it drives me crazy," says Yuriy Vitrenko, the head of Naftogaz, Ukraine's national oil and gas company. The most vulnerable bits of the system are rapidly being protected with new air defences, but even if incoming Russian missiles are intercepted, the falling shrapnel is dangerous.

Financing Ukraine's energy system is just as problematic. Fierce debates rage inside the government about how much gas needs to be stored for the winter. In any normal year, Ukraine would seem well-stocked. It has 11bn cubic metres (bcm) of stored gas, one of the highest totals in Europe, and is increasing that at a rate of one bcm per month. Given the 50% fall in consumption—a consequence of the devastating effects of the war on industry and the flight of people out of the country—Ukraine should be able to cover most of its needs with its own production, backed up by only limited additional purchases. But the government wants a more comfortable buffer, of 19 bcm. Naftogaz is arguing that 15 bcm should be enough. Ukraine is no longer directly dependent on Russian gas, but it is concerned by Vladimir Putin's intent to use it as weapon, freezing Europe so that its support for sanctions weakens.

In Okhtyrka, Naftogaz is trying to make sure that locals have plenty of options. A new gas boiler is being manufactured in nearby Kharkiv. But the hope is that local power needs will be met by a new biomass-powered boiler. The wood pellets that it burns will at first come from elsewhere in Europe, but eventually they will be sourced locally. If Okhtyrka can get through the coming winter, it could demonstrate how to make power generation across the whole country more decentralised, cheap and renewable. Mr Yurko says he is optimistic that the new boilers will be working in time. But he confides that he has stopped shopping in the local market after being besieged by worried people.

The prevailing mood in that market appears to have changed little, with most shoppers resigned to a very difficult winter. "You want to know what I think?" asks Artyom, a fruit- and vegetable-seller. "I don't think anything, because thinking means falling into a depression." ■

The Ukraine war

Deep battle

KYIV

Ukraine's new rockets are wreaking havoc on Russia's army

“RUSSIAN FORWARD ammunition dumps are quite possibly the most unsafe places in any war zone,” explained an American army handbook published in 2016. Munitions were not stored safely, it noted, and many dated from the Soviet era, close to their expiry dates, creating “a tinderbox ready to explode”. “Priority targeting of these areas will cause a serious logistics strain on the Russian system,” it concluded. Ukrainian generals are now putting that theory to the test.

On July 11th a Russian ammunition depot in Nova Kakhovka in southern Ukraine exploded in spectacular fashion. Satellite images showed that the entire facility vanished overnight. It is thought to be the latest victim of the High Mobility Artillery Rocket System (HIMARS), which America began sending to Ukraine in late June.

America has provided eight launchers and on July 8th said it would send four more. Each one carries a pod of six GPS-guided missiles accurate up to 84km or so—nearly three times the range of the howitzers sent earlier. American officials had been wary of providing more of these weapons until it was clear that Ukraine would use them effectively. Although they look superficially similar to Soviet-era rocket launchers, which rain down warheads over a large area, they are much more precise and need to be used judiciously to conserve ammunition.

So far, Ukraine appears to be passing that test. The Nova Kakhovka facility was thought to have been the 19th such depot to

have gone up in flames since June 27th, according to a tally by Kyle Glen, an open-source analyst. A 20th followed in Luhansk city on July 12th. A strike on a command post in Kherson province on July 10th is said to have killed many senior officers, including the major-general in charge of the 22nd army corps.

HIMARS strikes appear to have occurred all along the front lines, from Luhansk in the east to Kherson in the south (see map, which shows fires detected by infra-red satellites). Kirill Mikhailov of the Conflict Intelligence Team, an open-source research group, says the first battery of four launchers was deployed on the left bank of the Dnieper River and has been used against targets in Kharkiv, Zaporizhia and Donbas. More recently, another has been deployed to the right bank and appears to be preparing the ground for a counter-offensive around Kherson province.

Ukrainian commanders are cock-a-hoop. They say HIMARS is tilting the war back in their favour after the recent loss of Severodonetsk and Lysychansk, cities in Luhansk. A colonel in charge of its deployment says that the weapon is proving effective against a range of targets, from command posts to barracks, while remaining almost immune to return fire thanks to its ability to “shoot and scoot” quickly. Ukraine appears to be using Soviet-era rockets to confuse and overwhelm Russian air-defence systems, before launching the new GPS-guided rounds.

The colonel says that dozens more launchers would be needed to enable a serious counter-offensive. He also acknowledges that HIMARS may grow less effective as Russia adapts, for instance by disguising key targets. But the fact that Russia's army did not take such precautions despite weeks of notice that HIMARS was coming points to a structural problem.

America's army tends to disperse and conceal its ammunition dumps across a

number of smaller sites. Russia's army, which relies heavily on trains to move munitions and human muscle to load them onto trucks, has instead created big depots close to railheads—often by taking over civilian industrial distribution centres. That was fine until HIMARS turned up. Dispersing those depots would require a huge amount of new equipment or manpower. Moving them farther away from the front lines would also strain the army's limited fleet of trucks: doubling the distance more than doubles the number of trucks required, or more than halves throughput.

Even if Russia were to move its supply chain painstakingly out of HIMARS range, the respite might be only temporary. America, wary of escalation, sent the launchers on condition that Ukraine would not use them against targets on Russian soil. As a further precaution, it did not provide the longest-range munition: the Army Tactical Missile System (ATACMS) of 300km range. If it were to do so, every square inch of Russian-occupied territory would become well within range of Ukrainian firepower. This includes Crimea, which Russia annexed in 2014, as well as the Kerch bridge connecting it to Russia, ships in Crimean ports and many other juicy targets. ■

Inflation in Turkey

The price is wrong

GAZIANTEP

Grappling with inflation that unofficial estimates put above 100%

THE FESTIVAL OF SACRIFICE, which started across the Muslim world on July 9th, celebrates the prophet Abraham's willingness to take his son's life when asked by God to do so. (A lamb turned out to be enough in the end.) To this day the holiday features the ritual slaughter of an animal, usually a cow or a sheep, and the distribution of its meat to relatives and the needy.

At livestock markets in Turkey, the act of buying the animal is often a ritual on its own. The seller and the buyer lock hands, begin haggling, and loosen their grip only when they have agreed on a price. The handshakes, which range from the vigorous to the downright violent, can last minutes. Wrists are occasionally sprained. Fingers can break.

This year, the handshakes have been few and far between. At a market on the outskirts of Gaziantep, a city in Turkey's south, Ali Erturk, a farmer, says he has sold only a quarter of the sheep he brought with him, with only one day to go before the start of the holiday. By the same time last year he had sold all of his animals. Hassan, ▶▶



Runaway

Turkey, consumer prices
% increase on a year earlier



▶ a local factory worker, walks away with a sheep he has bought for 5,000 lira (\$290), the equivalent of his monthly wage. Others walk away empty-handed. The animals are the only ones pleased with the outcome.

Around the world people are learning to live with increasing inflation. In Turkey they are having to cope with the runaway kind, and with a government they suspect of massaging the numbers. In late June a group of researchers put inflation in Turkey at 160%, double the official rate of 79%. A survey showed that seven out of ten Turks believed that group's figures rather than the government's.

Inflation, along with a rapidly depreciating currency, has ejected many from the middle class. Millions of blue-collar workers, young people and pensioners have fallen below a poverty line of around \$1,200 a month for a family of four. But soaring prices, combined with low interest rates imposed by Recep Tayyip Erdogan, Turkey's president, have also driven up demand. Turks with money to spare, though dwindling in number, have been splurging on cars, electronics and other consumer goods. "People spend money as soon as possible," says Arda Tunca, an economist, "because its value is bound to decrease."

That spending spree, plus a record level of exports, helped the economy expand by 7.3% in the first quarter of the year. But very few Turks are feeling the benefit. Over 70% say their economic situation has deteriorated over the past year. Only 10% say that it has improved.

Turks tend to rely on foreign currency to protect their purchasing power. The value of dollar deposits in Turkish banks has exceeded the value of lira deposits since 2019. But even the dollar, which has appreciated by nearly 30% against the lira this year, has not been an adequate buffer against the rate of inflation Turkey has seen. As a result many Turks are pouring their savings into more volatile assets, such as high-risk stocks or cryptocurrencies. Nearly 19% of internet users in Turkey own cryptocurrency. That is the fifth-high-

Farming

How many cows are too many?

AMSTERDAM

And is a nut a fruit, asks the Dutch government?

AROUND THE CORNER from the office of Mark Rutte, the Netherlands' prime minister, lies the Koediefstraat, or "cow-thief street". Many Dutch farmers might find the name appropriate: by their lights, the government wants to rustle their cattle. On June 10th it unveiled proposed limits to nitrogen pollution, such as ammonia from fertiliser and manure, to abide by EU biodiversity rules. Farms next to nature reserves must cut nitrogen output by 70%. About 30% of the country's cows and pigs will have to go, along with a big share of cattle and dairy farms.

Since then farmers have protested so boisterously that one might think it was legal to drive a John Deere on the motorway. Pastures are festooned with the slogan "no farmer, no food". Farmers have parked tractors in front of the Senate, harassed government ministers at

their homes and blockaded distribution centres to press supermarkets to take sides. They tried to intimidate a vegetarian food company into removing passages on its website stating that cattle-raising contributes to climate change.

The Netherlands is the biggest nitrogen polluter in the EU. The density of cows in parts of the country exceeds that of any other region of Europe. The government says that Dutch farmers will be paid the full value of any land, cattle or machinery they have to take out of production, and will get subsidies to convert to ecological farming. But radical groups such as the Farmers' Defence Force say they will resist anyway. Far-right politicians have taken up the cause, claiming that the pollution limits are in fact a conspiracy by the World Economic Forum (the organisers of the annual Davos shindig, much beloved by globalisers) to replace farms with housing for immigrants. On July 3rd the government appointed a mediator, but the farmers' groups have refused to meet him.

When it comes to food, good intentions and poor planning seem to be a problem lately for the Netherlands. In March the new government promised to fight obesity by eliminating VAT on fruit and vegetables. But as America's government discovered in the 1980s when it labelled ketchup a vegetable, determining which foods fall into such categories is harder than it seems. (Is juice fruit? What about nuts? Italians think so. Fruit rolls?) Experts have been dispatched to study the problem. Perhaps the partisans of orange juice will prove less ornery than cattle farmers.



A veritable nitrogen factory

est share in the world, according to a report published earlier this year.

Wealthier types have also turned to property as a store of value. The result is a bubble. Over the past year, property prices in Turkey have increased by 182% in nominal terms, according to a recent survey. In Istanbul, home to some 16m people, they have more than tripled. Rents have followed the same pattern. Young people say they cannot afford to live on their own, much less start a family.

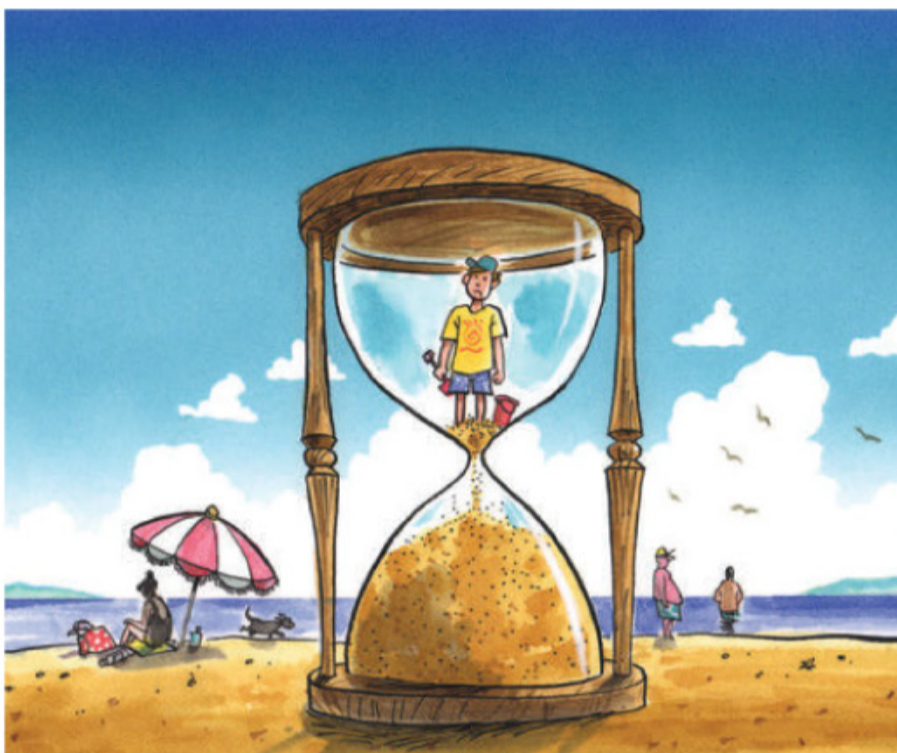
Turkey saw similar price rises during much of the 1980s and 1990s. But inflation then was easier to cope with, thanks to more predictable policies, including high interest rates. "Today, we're like Alice in Wonderland," says Seyfettin Gursel, another

economist. Mr Erdogan's insistence on low interest rates is forcing his officials to come up with off-the-cuff measures to prop up the currency and fend off inflation. None has worked. Big increases to the minimum wage have shielded workers from the effects of yesterday's inflation but have become the cause of tomorrow's. With elections set for next year and his political life on the line, Mr Erdogan is all but certain to ramp up spending.

There is only so much he can do. The spike in consumer demand that powered the economy for the first few months of the year has begun to run out of steam. Ordinary Turks are running out of ways to cope with inflation. Their sacrifices are nothing to celebrate. ■

Charlemagne | Leisure class

In praise of Europe's axis of short school summer breaks



CONSIDER THE SUMMERS of two sets of Viborg youngsters. Those from the Danish city of that name (pronounced VEE-bohr), the charming historic capital of the Jutland peninsula, are now three weeks into their end-of-year holidays—and will be back in school by early August, just three more weeks away. How cruel that must seem to their distant cousins in Viborg, South Dakota (pronounced VYE-burg), settled by Scandinavians in the 1860s. The pupils at Viborg-Hurley High, home of the Cougars, won't have to think of textbooks and detentions until a week before September. That will be a full 13 weeks since they broke up in late May.

Europeans suffer from—or enjoy—a reputation for leisure and plentiful holidays. This is well deserved for adults, many of whom will soon be turning on their out-of-office messages for weeks on end. Children are not always so lucky, relatively speaking. An axis of countries running through Europe, including Denmark, Germany, the Netherlands, and bits of Switzerland, have some of the rich world's shortest school breaks. Others, for example in France, Portugal and Sweden, have holidays to rival America's. Pupils may not like it much, but more time spent in the classroom is good for them. It also has desirable consequences for their parents and society as a whole.

Every school system offers respite from the labour of learning, if only to give run-down teachers a breather. The human brain needs rest. The original reason for having the longest respite in the summer is said to be that, in the old days, young arms were needed to help with harvests. In fact well-off urbanites who did not fancy spending their summers in sweltering cities probably had more to do with it. Either way, the break is now an immovable feature of the calendar. Whether set at national, regional or school-district level, the length of time off rarely changes. Children look forward to it for months, while parents wonder how to keep their sprogs busy even as they themselves often have to work.

Of all the reasons to prefer shorter holidays, their impact on learning is the most obvious. Staying away from school for too long results in what experts call “the summer slide”. Budding brains have a knack for forgetting what they have just been taught. Reading, writing, and particularly arithmetic suffer as weeks away from school turn into months. Shorter breaks translate into longer

terms, too. Danish pupils spend around 200 days a year at school, typically 20 more than their peers in America, France or Sweden (albeit fewer than those in Japan or China). Over the course of a child's upbringing that adds up to roughly a year's-worth of extra tuition. An overlong summer break also structures the school calendar in undesirable ways. In most places exams are lumped in the spring, so that youngsters can regurgitate their knowledge before they check out mentally; it would be better to have students tested throughout the year rather than in one stressful burst.

Long school holidays have an impact beyond the classroom, too. Whatever the reason for the annual summer sabbatical, it was devised at a time when single-parent families were rare and mothers were expected to stay at home while children were small. This has changed; the educational calendar has not. The more time children spend in school, the easier things are for busy parents: that history class is also a form of child care, no matter how much teachers resent that thought. Extending the amount of school time has been found to increase the opportunities for all parents to work, which in practice particularly benefits women.

Beyond penalising students and parents, long holidays accentuate inequality. The effect of summertime learning loss is worst for poorer pupils, and helps explain part of their shortfall in grades against their better-off peers. That is in part because well-heeled parents can afford weeks of space camp, coding classes and other enriching activities during holidays—a veritable industry now exists in America to polish youngsters' cvs in readiness for college applications. Meanwhile, poorer children stay at home and do nothing (or worse).

Schools in Europe are more likely to think of themselves as not just educating the young, but turning them into citizens. That is easier if everyone has more equal opportunities both inside and outside the classroom. Some have long breaks, but find ways to alleviate their side-effects. In France, for example, families that cannot afford to decamp from home can send their children to cheap state-run leisure centres, often on school premises. They don't learn much, but are out of their working parents' hair.

Most countries ought to go Dutch or Danish: shorten their holidays to six weeks in summer and roughly that again over the rest of the year. Students will be glad to hear this is nowhere near the political agenda, at least in Europe. The lengths of school breaks are essentially set in stone, beyond the odd debate of shifting one week of time off from one season to another, or staggering them so not all families end up vying for the same beach chair at the same time. Powerful teachers' unions insist long breaks are needed both to allow them time to train and to attract candidates to what are often poorly paid positions. But need it be thus? Months off in summer are a perk, no doubt. Yet it is one educators end up paying for. Those in Germany, for example, have short breaks but earn roughly as much as professionals with similar levels of education. In America, teachers get more time off but are paid relatively less.

Summer lovin'

What of a teenager's need to switch off, to be bored, even? A stretch of summer with little to do and parents too busy to nag has turned out to be a formative experience for many. That is a fine argument. But a youngster does not need endless weeks away from school to claim boredom: a few hours without a screen will usually suffice, in Charlemagne's experience of parenting. A decent break in summer is a human necessity, to be savoured. But as so often, it is possible to end up with too much of a good thing. ■

SEVEN IN 10 BUSINESSES ARE AIMING FOR NET ZERO

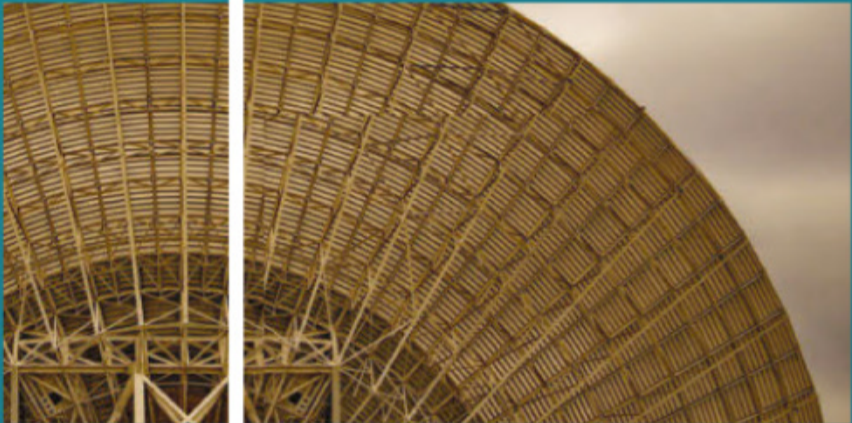
Explore The Sustainability Project, a platform to empower your progress.

Join a network of business leaders and industry experts working to achieve sustainability targets.

The Sustainability Project brings people and organisations together—driving change through in-depth research and insights, global influence and opportunities to collaborate.

www.economistimpact.com/sustainability

ADVERTISEMENT



The Sustainability Project



DIGITAL INNOVATION PARTNER



British politics

Trust exercise

What the early race to succeed Boris Johnson says about the Tories

THE CONSERVATIVE PARTY is a machine for winning and holding power. It has a remarkable capacity for reinvention, changing before change is forced upon it at the ballot box. Boris Johnson's successor will be the party's fourth leader, and Britain's fourth prime minister, since it entered government in 2010. Before 2024 is out, they will be pursuing an unprecedented fifth general election victory.

The contest that is now under way is still in its early days. As this article was published, Tory MPs had whittled down the field from an initial 11 candidates to six; the last two contenders left standing by MPs will appear in hustings over the summer, before a ballot of party members leads to the unveiling of a new prime minister on September 5th. A leadership contest is not a manifesto for government: the candidates' platforms are not addressed to the wider British public. Yet all the same the early days of a contest reveal where the centre of gravity lies within a party, and where it thinks its route to power lies.

The contours of the party after Mr Johnson seem to be to the right of where they

were on economics and culture. Some of his most controversial policies have become a new consensus among MPs. But there are also signs—most obviously in the rise of Penny Mordaunt, a former defence secretary who has swiftly become the bookmakers' favourite (see chart)—of how this steelier tone can be reconciled with the party's hopes of winning the next election. "There has been a shift [to the right]," says one centrist minister. "But it is the genius of the Tory party to harness it and get it into a vaguely acceptable place."

Like a body expelling an illness, the entire field repudiates Mr Johnson's jocular

and scandal-prone style of government. All candidates boast of their integrity, seriousness and grip; none seeks to be his heir. Rishi Sunak, the former chancellor who picked up the most endorsements among MPs in the first ballot on July 13th, promises an end to "comforting fairy tales". Kemi Badenoch, an insurgent from the right of the party, declares that voters are "exhausted by platitudes and empty rhetoric". Inexperience is a virtue: Tom Tugendhat, a former soldier who has never held ministerial office, promises a "clean start".

Ms Mordaunt is the greatest beneficiary of a party hankering for change. She is the "antidote to Boris" and a "cleanskin", according to supporters at a garden party she co-hosted in Westminster on July 13th, complete with jugs of Pimms, a brass band and sponge cake. "We've had three years of celebrity-tosser-on-a-high-wire politics," says one. A naval reservist who fell out of favour under Mr Johnson, Ms Mordaunt urged MPs to pick a leader based not on ideology but "because you trust their motives". Unlike flighty Mr Johnson, says another ally, she gets the provincial habits of the volunteer party.

Mr Johnson's vision of an activist state improving the lot of the poor northern towns he won in 2019 is also not widely shared. This is a contest in which everyone claims to be a small-state conservative. Ms Badenoch pledges a "limited government focused on essentials". The serving chancellor, Nadhim Zahawi, who was knocked out of the race on July 13th, promised to cut ▶▶

→ Also in this section

27 **The British dream**

28 **Bagehot: Let MPs decide**

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

— **Boris Johnson's caretaker government**

— **Assessing the British army**

— **A new Shakespeare theatre**

▶ departmental budgets by 20%.

Yet in other ways Mr Johnson has transformed his party. The opening days of the contest were marked by frenzied promises of tax cuts as a gulf opened up between Mr Sunak, who says tax cuts must wait until inflation is brought under control, and many of his rivals, who said they should start now and in dramatic fashion. Ms Mordaunt wants to cut fuel duty in half; Liz Truss, the foreign secretary, promises a reduction in corporation tax and national insurance, a payroll tax. Such pledges revealed a Johnsonesque aversion to hard choices. “We can’t simply be accountants trying to balance the books the whole time. We have got to look to growth as well,” said Kwasi Kwarteng, a cabinet minister who backs Ms Truss.

Some of Mr Johnson’s most radical policies will survive him. In his final months in office, the government agreed a deal to deport some asylum-seekers to Rwanda. Ms Truss prepared legislation that would allow Britain unilaterally to rewrite the bit of the EU withdrawal treaty that bears on Northern Ireland. Such policies were regarded by much of the party’s liberal wing as an abrogation of Britain’s obligations. Now they are its new norm: Mr Tugendhat, probably the most liberal candidate in the race, was swift to endorse them.

Suella Braverman, the attorney-general, sought to shift the dial even further to the right, promising to shred the Northern Ireland protocol entirely and to leave the European Convention on Human Rights. She is unlikely to win, but historically such campaigns can force others to make pledges they later regret, says Tim Bale, an historian at Queen Mary University of London.

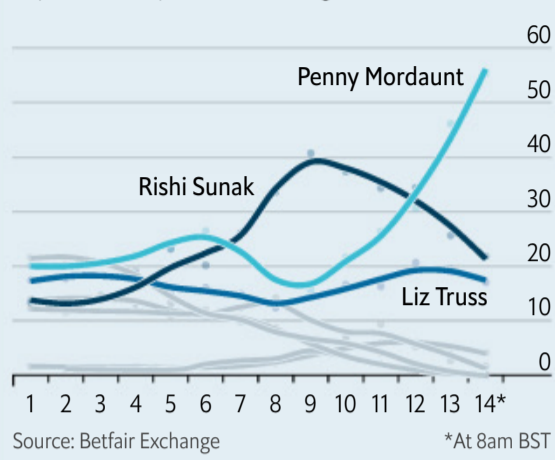
Rows over culture, race and gender identity scarcely featured in the leadership contest of 2019, when Mr Johnson triumphed. The world has since changed, and these issues now course through the party’s veins. Ms Badenoch, a disciple of Thomas Sowell, an American academic, has made confronting “zero-sum identity politics” the centrepiece of her campaign. Candidates skirmish over who is best-placed to resist transgender activism; Ms Mordaunt spent the first days of the campaign denying sympathy for that cause.

Whether this terrain is one on which the Tories can fight and win the next general election is less clear. Unfunded tax cuts are likely to fuel inflation, which is already squeezing living standards, and to force the Bank of England to tighten monetary policy more. The National Health Service, which Mr Cameron and Mr Johnson both regarded as the route to success, is suffering severe backlogs; it has barely intruded on the contest. Culture wars animate the public less than they do MPs. The Labour Party has a commanding lead in the polls.

Although the peril faced by the Tories

Penny doesn’t drop

Britain, Conservative Party leadership chances
July 2022, % implied from betting-market odds



has not featured much in public debate thus far, these hard electoral realities weigh more heavily in private. A formula of personal trustworthiness and lower taxes differentiates Ms Mordaunt from both Mr Johnson and one of her main rivals. “No-one really knows what she thinks,” said one half-hearted supporter, as the band struck up the theme from “The Great Escape”. “But Rishi will lose me my seat.” That instinct for reinvention still exists. ■

Ethnic-minority candidates

The British dream

A diverse Tory leadership contest and a confident new story of integration

“LET ME TELL you a story about a young woman almost a lifetime ago who boarded a plane armed with hope for a better life and a love of her family.” So began Rishi Sunak, in a video to launch the former chancellor’s campaign to become the new leader of the Conservative Party and Britain’s next prime minister.

“I’m a father, an immigrant, a self-made businessman,” declared Nadhim Zahawi, the current chancellor, who arrived in Britain aged 11 as a refugee from Iraq. Suella Braverman, the attorney-general, spoke of her mother, who came from Mauritius, and her father, from Kenya. “They loved Britain. It gave them hope, it gave them security, this country gave them opportunity.” Sajid Javid, a former health secretary, tells the story of his father, who arrived from Pakistan with £1 (\$1.20) in his pocket.

The ethnic diversity of the candidates for the Conservative Party’s leadership election has been striking. The field is now being whittled down—Mr Zahawi and Mr Javid are already out of the race—but of the 11 who declared they would run, six are of black or Asian heritage. Just as notable is

the bright and confident story that these candidates tell of immigration: what Mr Zahawi, borrowing from an American tradition, calls “the British dream”.

Britain, this story goes, is a special place where anyone can see their children prosper if they try. “In any other country, I might have been left behind, forgotten about, my future vanishing before I’d even finished school,” Mr Zahawi once remarked. There is some truth in this: in 2019 88% of Britons said they’d be “comfortable” with an ethnic-minority prime minister, higher than any country in the EU.

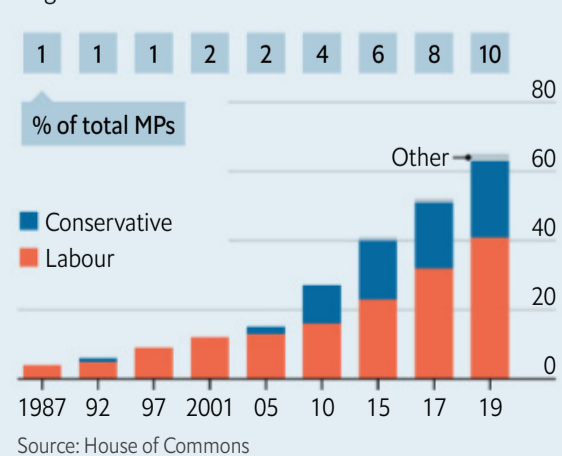
This is part of a Tory tradition of “inclusive meritocracy” that stretches from Benjamin Disraeli to Margaret Thatcher, says Sunder Katwala of British Future, a think-tank that specialises in integration. But it is also a transformation for the Conservative Party (see chart). In the 2005 general election just two non-white Tories won seats. By 2019 it had 22 such MPs—just 6% of the parliamentary party, a much lower proportion than in the Labour Party, but a cohort that seems to have sought out the top jobs. Merit was given a helping hand: David Cameron, a former leader, helped non-white candidates into safe Tory seats.

The British dream downplays the obstacles faced by ethnic minorities. Racism, in the Conservative story, tends to be described as acts of individual hatred rather than a systemic phenomenon. Kemi Badenoch, an insurgent candidate whose family were from Nigeria, is the Conservative Party’s most prominent critic of the Black Lives Matter movement.

It also seems to shape an increasingly sharp distinction in immigration policy. Priti Patel, the home secretary, who was born in London to a Ugandan-Indian family, has liberalised visa rules for skilled migrants, making Britain more accessible to the middle classes from countries such as India and the Philippines, while instigating a programme of deportations to Rwanda for those who cross the English Channel in dinghies. The British dream is open, but the huddled masses need not apply. ■

Minority pursuit

Britain, number of ethnic-minority MPs
At general elections



Bagehot | The rotten presidency

MPS alone, not party members, should choose the next prime minister



BORIS JOHNSON can claim to be Britain's first president. The votes of 92,153 members of the Tory party, not those of its MPs, put Mr Johnson in Downing Street in 2019. As the debate about his place in history starts, the fact that he was the first prime minister to be directly elected by voters, even if by only a handful of them, is barely mentioned.

After Mr Johnson's announcement on July 7th that he would step down, the Conservative Party is sticking with this method to find his successor. Since 2001 Conservative MPs have reduced themselves to choosing two candidates and then letting the 180,000-strong membership of the Conservative Party have the final say over their leader, even when they are also choosing the head of the government. That risks turning the role of prime minister into a rotten presidency.

An ersatz presidential race will take place in July and August. Two Conservative candidates will roam the country begging for the votes of a tiny, self-selecting electorate. Candidates will unleash campaign slogans, smear each other and face off at hustings, just like any other presidential election. Where suffrage was once limited to propertied men, today it is limited to those who paid £25 (\$30) to join the Conservative Party. Imagine a National Trust membership—except, rather than free entry to stately homes, you may get to choose the prime minister every few years.

The problem is not the electorate. Conservative MPs often think their membership is nuts. Thankfully, they are wrong. Although they may be older, richer and more male than the electorate as a whole, views of Tory members are roughly in line with bog-standard centre-right opinion. They are a bit more forthright than MPs when it comes to law and order, and a bit more left-wing than the typical Tory MP on economics, according to one study. But they are not rabid headbangers waving “Eat The Poor” placards.

Likewise, MPs do not have a monopoly on wisdom. They often lack it. In 2016 Theresa May was chosen by her fellow MPs after the slapstick implosion of her rivals meant there was no one left to run against; she won by default, without the need for a vote among party members. In less than a year, she had blown her majority.

A neo-Gothic palace by the Thames is a terrible place to gauge the mood of voters. In contrast, Conservative members are canny.

In 2005 David Cameron was a far-sighted choice. The former Conservative leader pledged a socially liberal, tieless form of Conservatism to compete with the slick managerialism of Labour. Likewise, choosing Mr Johnson as party leader was a gamble that paid off, in the short term. The Tories began 2019 with the worst polling in decades; they ended it with their biggest majority in 30 years.

The problem with the system is the principle rather than the end-product. For starters, an MP could have the support of only a minority of the parliamentary party and still become prime minister, if they are able to charm enough Rotary Club members from Witney. Across the chamber, Labour activists thrust Jeremy Corbyn onto an unwilling Labour parliamentary party twice. Misery ensued. Safeguards do exist: Conservative MPs can remove their leader with a simple confidence vote. But far better to pick someone with guaranteed support in the first place.

Defenders of the system argue that MPs will put only well-qualified candidates in front of the membership. But Conservative MPs prefer victory to competence. If a candidate proves surprisingly popular with members, MPs—aware that their careers depend on backing the right person—will follow. There is no point in backing someone good if you know they will be beaten by inept rivals who have spent years greasing up association members in Solihull.

Indeed, rather than allow a thoughtful interrogation of their colleagues, Tory MPs have opted to rattle through their part of the voting process. The final two candidates will have been chosen by MPs by July 21st. Not only must Conservative members then make the final decision on who to pick. They must also stress-test any future prime minister, grilling them on everything from tax policy to Ukraine. In opposition, this method is fine. The winner of any contest, whether members' ballot, trial by combat or a coin-toss, is put before voters in a general election before they can lead a government. Picking prime ministers should be a different matter. It is not right that the votes of the upstanding members of Richmond's local Tory party association determine who gets handed the nuclear codes.

Take back control

Outsourcing the decision of who enters Downing Street is a dereliction of duty by MPs. One of the more compelling arguments for leaving the EU was that it would compel MPs to pay attention to the laws they pass, rather than rubber-stamping a directive from the EU's legislative machine. But if MPs do not feel qualified to pick a prime minister, they should not feel qualified to vote on a law.

Creating a de facto presidency is a recipe for constitutional stress. Candidates to become prime minister end up appealing to a narrow caucus of self-selecting members, rather than lawmakers chosen by the electorate at large. This is a path to polarisation. And government in Britain is supposed to be a collective endeavour, with an executive ruled by a cabinet and held in check by Parliament. One of the least appealing parts of Mr Johnson's reign was his presidential manner.

Competing mandates poison the British constitution. Brexit turned into a mess partly because the principle of direct democracy crashed into the concept of parliamentary democracy. MPs wrestled with a policy that the majority thought was a terrible idea; on the Labour benches, MPs sat behind a man they thought was useless. A presidential prime minister, claiming a separate mandate, is the last thing the country needs. Parliamentary democracy is a fine thing. MPs should, to coin a phrase, take back control. Why not start with who lives in 10 Downing Street? ■



American diplomacy

A voyage to nowhere

JERUSALEM

America's president embarks on an aimless trip to the Middle East

FOR DECADES American presidents have arrived in the Holy Land like earnest pilgrims searching for the Grail of a two-state solution. George W. Bush hoped to find it in 2003 with his “road map for peace”. Barack Obama came in 2013 when John Kerry, his secretary of state, was trying to restart Israeli-Palestinian talks. Even Donald Trump promised to “give it an absolute go”.

Joe Biden has lost the faith. His nearly 48-hour visit to Israel and Palestine, which began on July 13th, was designed to be an exercise in banality: shake a few hands, see a few sights, head back to the airport. No president in recent memory has arrived with so little to say about the region's most intractable conflict.

It is hard to blame him. Both Israelis and Palestinians are in political turmoil. Even if Mr Biden wanted to wade into the peace-process swamp, there is no one to join him. And the conflict no longer seems as important as it once did. After decades of insisting that the status quo was not sustainable, America has decided it might be.

When the trip was planned, the hawkish Naftali Bennett was Israel's prime minister. His government collapsed last month and an election, the fifth since 2019, is set for November. It was Yair Lapid, the caretaker prime minister, who hosted Mr Biden. The president did make time—albeit just 15 minutes—for Binyamin Netanyahu, who hopes to make yet another comeback.

The Palestinians received far less attention, only a brief scheduled stop in Bethlehem to see Mahmoud Abbas, the 86-year-old president who governs the West Bank. Mr Biden was expected to pledge \$100m in aid for hospitals in East Jerusalem that offer specialist care to Palestinians who cannot find it in the occupied territories, re-

versing a senselessly cruel cut Mr Trump ordered in 2018. It is a laudable step, but a paltry one, showing how hopelessly deadlocked it all is. Mr Lapid's party supports the two-state solution in principle, but he may not have time as prime minister for real diplomacy with the Palestinians, who themselves remain utterly divided. Mr Biden offered the routine bromides on the peace process, but his heart was not in it.

The real focus of Mr Biden's trip would begin on July 15th with his arrival in Jeddah. Even Israelis acknowledge that they are a warm-up act. “He's coming here first because it's now clear to the Americans they can't deal with their allies in the region separately, as we're much better coordinated now,” says a minister.

The administration would like that coordination, long conducted in secret, to be more publicly acknowledged. Mr Biden will urge the Saudis to draw closer to Israel, and to pump more oil. He wants to avoid an American recession and a thumping for the Democrats in the mid-term elections.

The trip's most fraught moment is a planned encounter with Muhammad bin Salman, the Saudi crown prince, a *bête noire* for many Democrats because of his chummy ties with Mr Trump and his dismal human-rights record. Mr Biden had refused to talk to him since he took office.

For weeks the president insisted he was not going to Jeddah, the Saudis' commercial capital, to meet Prince Muhammad. ▶▶

→ Also in this section

30 Gaza's siege generation

31 Cattle and conservation in Kenya

32 A legacy of looting in Angola

► Instead he would attend a broader meeting with leaders of six Gulf countries, plus Egypt, Iraq and Jordan. If the *de facto* ruler of Saudi Arabia should happen by a diplomatic summit in Saudi Arabia, perhaps he would say hello. This was comical spin; that Mr Biden felt he had to offer it showed how controversial the trip was.

It would have been less controversial if it offered the promise of real achievements. It did not. Israeli officials play down talk of a breakthrough with Saudi Arabia, with good reason. The kingdom is in no rush to make a deal. It will settle for incremental steps: Mr Biden is expected to

announce in Jeddah that more Israeli airliners will be allowed to fly over Saudi airspace. On oil, even if the Saudis agree to pump more, it is unclear how long they can run fields at full tilt, and whether the world has enough refining capacity to turn extra crude into fuel that can be gobbled up.

In an unusual *Washington Post* op-ed on July 9th, Mr Biden set out a pre-emptive defence of his trip, saying it would show off America's "vital leadership role" in the region. It fell short. His hosts offered a friendly welcome, but they will probably send him home with little more than a few token souvenirs. ■

Gaza

The blockade generation

GAZA CITY

Young Palestinians in Gaza cannot find work and cannot leave

WHEN AMR MASRI started university a professor made a promise to his class: finish your studies and you'll find a job. He finished in 2019 with a business degree. Three years later, on a sweltering July afternoon, he is standing on Gaza City's main commercial strip. Next to him is a crate stacked with phone chargers and other gadgets, which he hawks to passers-by for ten or 12 hours a day, taking home 20 shekels (\$6) for the effort. "I found a job," he quips, pointing ruefully at the crate.

If he had grown up somewhere else, he says, he would look for work abroad. But he grew up in Gaza, which has been under Israeli and Egyptian blockade since 2007. Mr Masri has never left the tiny coastal enclave. Well-paying jobs in the Gulf might as well be on Mars. "The future? I've forgotten this word," he says.

This summer marks 15 years of the blockade imposed after Hamas, a militant Islamist group, won a plurality in Palestinian legislative elections and took control of Gaza. It has since fought four wars with Israel and keeps a hidden arsenal of thousands of rockets. Israel and Egypt say the blockade is needed for security: if they opened Gaza to the world, Hamas would stockpile more and better weapons; if it laid them down, the siege could be lifted.

Some Palestinians in Gaza think Hamas should. Many do not. Their views are almost irrelevant. Two-thirds of Gaza's 2.1m people are under 25. They were too young to vote in an election in 2006, and the incessant infighting of Palestinian politics has denied them a vote since.

They suffer the consequences of a blockade that punishes everyone. Like young people everywhere, they ought to be

planning the future: school, work, family. But they live in a place that denies them any hope of one.

Some 15,000 to 18,000 Gazans graduate from university each year. No small feat: they study by candlelight amidst blackouts that average 11 hours a day. Sameer Abu Muddalala, an economics professor at Al-Azhar University, says many of his students ask to attend class just three days a week because they cannot afford transport.

They graduate into a job market where the unemployment rate is 47%, and 70% for young people. Those who do find work earn a median daily wage of just 33 shekels, one-third of that in the West Bank.

A young doctor might collect 1,200 shekels a month. Reem Khaled, a dentistry student, expects her starting salary to be

no more than 700 shekels—little more than an unskilled labourer. That is if she finds a job: 74% of young graduates do not.

University was not an option for Ishaq Khalil. As a child, life was comfortable. His father worked on farms and construction sites in Israel, jobs that paid better than anything in Gaza. But he lost his Israeli work permit when the blockade was imposed. Mr Khalil had to start working as a teenager to support the family. There was a stint at a glass factory, until it went under (most businesses in Gaza cannot export goods outside the strip). He sold mobile phones in a shop until it was bombed by Israeli jets during the war of 2012. Then he sold them on the street, sneaking into Egypt via smuggling tunnels to buy his stock. That went on until the Egyptian army started flooding the tunnels. Such is life for many young Gazans: dead-end jobs cut short by politics and war.

Marriage can seem impossible. Ms Khaled would like to marry her college sweetheart, but they have no money for a wedding or a home. The engagement is not off, but neither is it on: they are in limbo. Mr Masri, the street vendor, paid for his wedding with a \$3,500 loan, around two years' salary. He worries every month that he will not earn enough to make a payment, because unpaid debts in Gaza are punished by a stint in jail.

A recent survey found that 37% of Gazans want to emigrate, versus 20% of West Bank Palestinians. But foreign jobs and visas are few. Students who win scholarships abroad sometimes cannot get there, as only around 500 Palestinians a day may leave through the Rafah crossing to Egypt, which requires a long wait or hefty bribe. Most young Gazans have never left.

Save the Children, a charity, says 77% of those under 17 are depressed and more than half have pondered suicide. Some have drowned trying to escape on rickety boats across the Mediterranean. Even getting high to forget your troubles is unaffordable: a single pill of tramadol, an opioid smuggled in from Egypt, costs three days' wages.

Saeb Faraj was ten when the blockade was imposed. Back then he wanted to be a martial-arts fighter, but his family could not afford the training. He started toiling in construction at 16 and today works ten-hour shifts on the beach selling grilled corncobs tossed in *duqqa*, a spicy blend. On a good day, he takes home 30 shekels.

Everyone in Gaza is quick to insist someone else has it worse. Mr Faraj gestures sadly at a father of ten, collecting cans. When winter comes, Mr Faraj loses his seasonal job. He rarely leaves his family home in the rainy months, since even the simplest activities, like meeting friends for a cup of tea, cost money. "My life," he says, "is like a tv screen with no picture." ■



Nowhere else to go

Kenya

Rhinos, cows and men with guns

SOSIAN

Violence racks the biggest, driest and poorest chunk of Kenya. Wildlife conservancies can help

THE VAST arid lands of northern Kenya are awash with guns. An AK-47 can be bought for two or three scrawny cows. Pay in cash and it might be as little as 5,000 shillings (a bit more than \$40). By one estimate Kenya harbours 750,000 illegal guns, though no one really knows. What is certain is that many are owned by cattle- and camel-herders in the sparsely inhabited north, where guns have replaced the spears that would have been the main weapon just a couple of generations ago. As a result, skirmishes have become far deadlier; a dozen may die in a single raid.

A former policeman who runs a peace-making project reckons that in the past year more than 100 people, including women and children, have been killed in one northern county alone, Marsabit. In one raid more than 60 perished. "The government has lost control," says a game ranger who hails from the Turkana people, who compete for grazing and water with the Samburu and others. The proliferation of firearms and the surging death toll have been exacerbated by civil strife across no fewer than four of Kenya's porous borders (see map on next page).

The most afflicted area lies to the north of an arc that starts midway along the border with Uganda and brushes the northern foothills of Mount Kenya before curving down to the Indian Ocean. The troubled region accounts for nearly two-thirds of Kenya's territory but only 7m-8m or so of its 54m people. Long neglected by the government in Nairobi, the capital, they are among the roughest, toughest and poorest in the country.

Much of the violence is sparked by the rustling of cattle and camels. This has long been endemic, but is aggravated by drought that pits herdsman against one another, and is made more common by climate change. UNICEF, the UN's agency for children, reckons that a quarter of the children in Marsabit county are malnourished and 3.5m northern Kenyans are "acutely food insecure". Competition for pasture and water has intensified as numbers of livestock have increased, not least because corrupt politicians launder their wealth through cattle. As a general and presidential election looms next month, unscrupulous candidates heighten ethnic tension.

The violence has permeated the dusty, scruffy towns as well as the savannah and semi-desert of the north. Near Marsabit

town the Borana and the Gabra (both related to the Oromo, Ethiopia's largest ethnic group) have been bloodily clashing. In Baragoi a faultline runs through the town between the Samburu and Turkana, who also sporadically do battle. In the unhappy town of Isiolo five rival ethnic groups jostle angrily for power and patronage.

Apart from cattle, the most abundant resource in swathes of the north is wildlife: elephants, rhinos, lions, giraffes and an array of other fauna and flora that Western tourists and a growing number of prosperous Kenyans will pay good money to admire—provided they feel secure. Tourism, which generates 8-9% of Kenya's GDP, has become vital to the poor north's economy.

But many locals, often with the connivance of politicians, have been lured into networks of poachers. This is hardly surprising, since a kilogram of elephant ivory has at times fetched as much as \$2,000 on the global (black) market. The same weight of ground-up rhino horn, to which the credulous ascribe medical and aphrodisiac qualities, might sell for \$70,000. A stockman working on a ranch, meanwhile, earns perhaps \$75 a month.

Starting in the 1970s, poaching led to a catastrophic tumble in the number of elephants and rhinos. According to one study, Kenya's elephant population fell from at least 150,000 in the 1960s to as low as 16,000 by 1989. Rhinos, by one count, plummeted from 20,000 to 240.

Finding a balance between protecting

wildlife and preserving the livelihoods of poor nomadic herders has long tested the ingenuity of conservationists. The bluntest approach was to restrict the pastoralists' right, as they saw it, to bring their livestock to graze wherever there was grass. Such curbs have sown enmity between competing tribes and also between herders, conservationists and white ranchers, some of whom still own vast tracts of land that pastoralists consider to have been stolen from them more than a century ago. Kuki Gallmann, an Italian who is also a best-selling author, has twice been shot and nearly killed by angry Pokot herders loth to remove their cattle from her nearly 40,000 hectares (100,000 acres).

Born free, live happily together?

Is there a way for the pastoralists, wildlife and conservationists to coexist? Ian Craig, a 69-year-old third-generation white Kenyan who was formerly a rancher and big-game hunter, believes that there is. In 2004 he created the Northern Rangelands Trust (NRT). It now provides advice, security and fundraising for 40-odd conservancies, all owned by not-for-profit trusts and local communities, covering more than 10% of Kenya's land. More than a hundred other conservancies have since emerged, following the NRT model.

Each conservancy within the NRT family, usually hosted by one or two ethnic communities, is governed by a council of elders that oversees such ticklish issues as allocating grazing land, protecting wildlife, building clinics and schools, and distributing fees from tourist camps and facilities on their land. Most conservancies let cattle mix with wildlife, but sometimes restrict them in times of drought or make them graze in designated areas.

The NRT provides a robust service of wildlife rangers. These include rapid-response teams, each proudly consisting of ▶▶



Man and beast can coexist

▶ several different ethnic groups, that have proved effective at catching poachers and rustlers. Mr Craig, among others, is widely credited with saving Kenya's rhinos from near-extinction. Kenya's rhino number has risen back to around 1,600; elephants are back up to nearly 40,000, a fraction of their old tally but no longer facing extinction.

The NRT also supports some 80 "peace ambassadors" who help settle differences between the competing ethnic groups. Mr Craig stresses that the NRT model is as much about development as about protecting wildlife. He has arranged for 14 of the NRT conservancies to be paid for carbon credits bought by international firms such as Netflix. "It's holistic," says Mr Craig.

The NRT has its critics. Some indigenous-rights lobbies denounce what they call "fortress conservation", arguing that wildlife enthusiasts, especially those who emphasise security and anti-poaching, put the lives of animals above those of humans. A year ago the Oakland Institute, an indigenous-rights organisation in California, published a vituperative attack on the NRT, accusing its rangers of involvement in scores of murders. It charged the NRT with being a neocolonial scam to "green grab" land. And it accused conservation outfits such as the Nature Conservancy and the World Wildlife Fund, plus an array of aid agencies, of letting the NRT flout the herders' rights by pushing them off their lands. Dr Mordecai Ogada, the fieriest critic of the NRT model, argued in a book titled "The Big Conservation Lie" that the conservationists' agenda is "intertwined with colonialism, virulent racism, deliberate exclusion of the natives, veiled bribery and unsurpassed deceit".

The NRT rebutted all these accusations in its own counter-report. "No way does NRT grab land, restrict grazing—or kill people," says Sam Lekimaroro, its head of security. But six of the trust's biggest donors were rattled enough to commission an independent report by a Kenyan indigenous-rights expert, Dr Kanyinke Sena.

Last month he found them all baseless; Oakland called his verdict "a sham". Dr Sena recognised "the valuable role and range of responsibilities that NRT fulfils for people and nature in northern Kenya", adding that "its peacekeeping activities help reduce the intensity and impact of community violence and that its livestock recovery programme helps reduce conflict". He concluded: "There is no question that we urge donors stay committed to supporting NRT programming and development."

Moreover, Dr Sena came to "the hard conclusion that Oakland researchers essentially parachuted into a highly complex situation and allowed themselves to be manipulated by a small group of politically motivated and self-interested NRT critics". However, a prominent white rancher says



that "in terms of the optics, white people and pony celebrity conservationists have got to disappear" from so many grand leadership positions.

So far no one has found persuasive alternatives to the NRT model of coexistence between wildlife, livestock and locals in conservancies backed by vigorous ranger teams. As Peter Martell puts it in "Flowers for Elephants", a recent book that weighs the arguments over Kenya's conservancy model, the embattled local people "had been confronted by an existential crisis" when poaching, habitat loss and lethal ethnic divisions had threatened their livelihoods. Thanks to the NRT's promotion and protection of wildlife conservancies, he concludes, they "had peered into the abyss—and stepped back". ■

Angola

A legacy of looting

JOHANNESBURG

José Eduardo dos Santos, a crooked ex-president, has died

HE WAS A master of patronage. José Eduardo dos Santos, who died on July 8th aged 79, was president of Angola for 38 years. He clung to power by deftly sharing its oil wealth with other bigwigs. Though he led a party called the People's Movement for the Liberation of Angola (MPLA), the people did not get a look-in. He enriched himself, his family and his cronies, while leaving only scraps for ordinary Angolans. Half of them still live on less than \$2 a day.

When Angola's first president, Agostinho Neto, died in 1979, party grandees misread Mr dos Santos as a pliable replacement. "He was chronically underestimated," says Ricardo de Soares Olivei-

ra, a scholar of Angola at Oxford University.

An anti-colonial war waged by the MPLA against Portugal since the 1960s had been followed by a struggle for control of the country after independence in 1975 between the MPLA, backed mainly by Russia and Cuba, and its arch-rival UNITA, backed by apartheid South Africa and the CIA. Under Mr dos Santos, who had trained as a petroleum engineer in the Soviet Union, the purportedly Marxist MPLA set up a parallel state based on revenues from offshore oil, which drew in American and other oil majors. By the mid-1980s Mr dos Santos had used oil rents and astute patronage to dominate the MPLA—and the state. "He was very street-smart," says Mr de Soares Oliveira, "full of the knowledge of men." His spies sniffed out intimate details about rivals, to blackmail or bribe them later.

In the 1990s the civil war worsened. After UNITA rejected the results of a multi-party election in 1992, the MPLA massacred UNITA supporters on Luanda's streets. Almost a decade of fighting ended in victory for the MPLA in 2002. His decision four years earlier to push for a total triumph was Mr dos Santos's "greatest contribution", argues Alex Vines of Chatham House, a think-tank in London.

Crony capitalism then took off spectacularly, as the MPLA swapped Vladimir Lenin for Louis Vuitton. Luanda became one of the world's most expensive cities as money from oil gushed through a capital that had to import almost everything else. Sonangol, the state-owned oil firm, ended up dominating the economy—and much else besides. MPLA bigwigs, Western oil men and wheeler-dealers swilled Pétrus and Johnnie Walker Blue at beach bars, and ate melons at \$100 a munch.

Angola also forged Africa's cosiest relations with oil-hungry China. Mr dos Santos projected power across the region, helping to dethrone Mobutu Sese Seko in Congo and backing liberation movements in Namibia and South Africa.

But the oil boom's bust spelt his end. The MPLA became increasingly concerned that he would install his daughter, Isabel, who ran Sonangol, as his successor. As his health faded, he was ousted in 2017 in favour of João Lourenço, who promised to clean up corruption. In 2020 Isabel was charged with fraud, embezzlement and money-laundering, all of which she denies. Her brother, José Filomeno de Sousa dos Santos, nicknamed Zenu, was jailed for massively defrauding the central bank.

Mr Lourenço has recently seemed less keen to root out corruption. Ahead of elections next month, in which the MPLA is being challenged by a resurgent UNITA, he has tried to bring his party together again. But the old man's acrimoniously divisive legacy endures. It is unclear whether Mr Lourenço can expunge it. ■



The culture war in education

Schools for scandal

WASHINGTON, DC

“Critical race theory” is being weaponised as part of America’s culture wars. What’s all the fuss about?

“IT’S LIKE a bomb went off,” says Christopher Rufo. Mr Rufo himself helped light the fuse. After George Floyd’s murder in May 2020, discussions about racism spread throughout schools, he says. Mr Rufo labelled those discussions “critical race theory” (CRT). Controversy around CRT has continued to grow—recently expanding beyond race to matters of sex and gender.

With the help of Mr Rufo, now a director of an “initiative” on CRT at the Manhattan Institute, a conservative think-tank, critical race theory, once an obscure academic topic, became a prominent Republican issue in a few months. Mr Rufo appeared on Fox News’s Tucker Carlson show in September 2020. “It’s absolutely astonishing how critical race theory has pervaded every institution in the federal government,” he said, and was being “weaponised against the American people”. He implored President Donald Trump to issue an executive order banning CRT. “All Americans should be deeply worried about their country.”

Suddenly the little-known theory was

on the lips of conservative pundits and politicians across the country. Sarah Longwell, a Republican strategist, saw the impact in focus groups. A journalist from the *Wall Street Journal* called to ask about CRT when it was just starting to percolate, she recalls, but she had not heard anything about it. Then, during the next focus group, “it was all anybody talked about.”

Forty-two states have introduced bills or taken other actions to limit CRT in classrooms; 17 have restricted it. North Dakota passed its law in five days. School-board meetings have become ferocious. Protesters claim that children are being forced to see everything through the lens of race.

→ Also in this section

36 New York’s graffiti revival

36 Recession-spotting

37 Georgia loses a bizarre landmark

38 Lexington: Democrats dither

The Manhattan Institute now supplies a guide for parents fighting against “woke schooling”, and the Goldwater Institute, another conservative think-tank, provides model legislation. Banning CRT in schools was a core part of Glenn Youngkin’s gubernatorial campaign in Virginia last year, and may have helped him win. According to a poll by *The Economist/YouGov*, 67% of Republicans in America favour statewide CRT bans (see chart 1 on next page).

Understanding what all the fuss is about requires answers to three questions. What is CRT? How widespread is its teaching in schools? And, third, to the extent that it is taught, is this good or bad?

The origins of CRT go back to the 1970s. The theory stressed the role of “structural” racism (embedded in systems, laws and policies, rather than the individual sort) in maintaining inequality. Take schooling. *Brown v Board of Education* required schools to desegregate with “all deliberate speed” nearly seven decades ago. Yet despite accounting for less than half of all pupils in public schools, 79% of white pupils attend a majority-white school today.

Progressives stretched the scope of CRT before conservatives did. The theory has spread into concepts like “critical whiteness studies”: read “White Fragility”, by Robin DiAngelo, and you might think white people can hardly do anything about racism without inadvertently causing harm to non-whites. Two years ago this ▶▶

▶ newspaper described the way CRT has evolved to see racism embedded in everything as “illiberal, even revolutionary”.

Now Republicans have co-opted CRT, also enlarging it to embody far more than its original intent. Mr Rufo brandished it to attack diversity training. “Anti-CRT” bills have spread to other topics. “Critical race theory is their own term, but they made a monumental mistake”, says Mr Rufo, “when they branded it with those words.” He proudly recounts how he has used the language as “a political battering-ram, to break open the debate on these issues”.

The issues have certainly gained ground. In April Florida’s governor, Ron DeSantis, signed HB7, known as the “Stop the Wrongs to Our Kids and Employees (W.O.K.E.) Act”. The law clamps down on the hiring of “woke CRT consultants” in schools and universities, and CRT training in companies. In June Florida’s education board banned teaching CRT and the 1619 Project, a set of essays published by the *New York Times* that puts slavery at the centre of the American story. The same month a bill in Texas was sold by its governor, Greg Abbott, as “a strong move to abolish critical race theory in Texas”. It bans the 1619 Project and discussions of several race- and sex-related topics in schools.

The anti-CRT movement has also begun to worry about the way schools teach gender and sexuality. This includes claims that educators are encouraging children to change their genders. A month before the Stop W.O.K.E. Act, Mr DeSantis signed the “Parental Rights in Education” law, which critics call “Don’t Say Gay”. It prevents discussions about sexual orientation or gender identity in kindergarten through third grade. Mr DeSantis claims both bills prevent “woke” ideology in schools.

More recently, social-emotional learning (lessons aiming to teach pupils non-cognitive skills such as managing emotions and being self-aware) has also been in the firing line. Some claim these lessons are used to indoctrinate pupils with CRT.

In other words “CRT”, to its opponents, has become code for any action that centres on the experiences of the disadvantaged (including non-white, lesbian, gay, bisexual and transgender people) at work or school. Opponents claim that pupils are being taught that white children are inherently racist, and that white pupils should feel anguish about their skin colour because of their ancestors’ actions. Another complaint is that pupils are being taught to hate America: that by emphasising the arrival of the first slave ship as the true founding moment of America in 1619, rather than in 1776 (as the 1619 Project does), CRT-type curriculums focus on America’s faults rather than its exceptionalism.

Is this stuff actually being taught in schools? Some say it is all a figment of Re-

publican imagination, and call it a witch hunt. “#CriticalRaceTheory is not taught in K-12 schools”, tweeted Randi Weingarten, president of the American Federation of Teachers (AFT), a labour union, a year ago. Yet it so happens that both the AFT and the National Education Association, America’s largest labour union, have announced support for teaching CRT in public schools.

Whether framed as CRT or not, educators are in fact incorporating progressive ideas about race, gender and more into the classroom, not least in response to changing demography. In 2000 white pupils were 61% of the public-school population. Now they are 46%. (About 90% of American children attend public schools.) A study from the University of California, Los Angeles (UCLA) found that the strongest predictor of whether a district had an anti-CRT policy was whether it had experienced a large decrease in white pupil enrolment (10% or more) over the past 20 years. Schools are changing, and so is the discourse within them.

Livid experience

Amy Bean of Scottsdale, Arizona, felt lied to when her principal told her that CRT was not taught in her child’s classroom. It was right there in the book, “Front Desk” by Kelly Yang, that her nine-year-old had been assigned. The book focuses on a ten-year-old girl, Mia, whose parents immigrated to America from China, and work and live in a

motel. In one chapter, a car is stolen. Mr Yao, the Asian motel owner, assumes a black person committed the crime. “Any idiot knows—black people are dangerous,” he says. When the police arrive, they interrogate Hank, a black customer, but not others. Later Mia asks Hank about this. “Guess I’m just used to it. This kind of thing happens to me all the time,” he says. “To all black people in this country.”

This passage was not explicitly about CRT, but it was clearly about racism and plants a seed about racial inequality. Ms Bean, a self-described conservative, was upset when the principal denied CRT’s existence in her daughter’s classroom. She would have liked the opportunity to talk to her daughter about it first or debrief her afterwards, she explains.

Some progressive policies have clearly gone too far. San Francisco’s school board is a notable example. Rather than striving to get children back into schools during the pandemic, it fretted about rebranding 44 schools named after figures linked to historical racism or oppression. The list included Abraham Lincoln. Voters fired three members of the board (see Briefing).

There have been other perplexing cases. In 2017 a parent in North Carolina accused a teacher of asking white students to stand up and apologise for their privilege. This was never proved. More recently, public schools in Buffalo, New York, found themselves in a controversy over their Black Lives Matter curriculum. Some say it is anti-white. Others say that the quotes from the curriculum were taken out of context.

Research and polling suggest that CRT, as defined by conservatives, has indeed spread, but is not as pervasive as critics fear. A media analysis by UCLA found that 894 districts (representing about 35% of all pupils) experienced a conflict over CRT between autumn 2020 and summer 2021. According to a poll by *The Economist* and YouGov, most people do not think CRT is being taught in their local schools. Among all those asked, 45% claim to know what CRT is, and 25% of total respondents have a negative opinion of it. But only 21% think children in their community are being taught it: 14% of Democrats thought so, and 35% of Republicans (see chart 1).

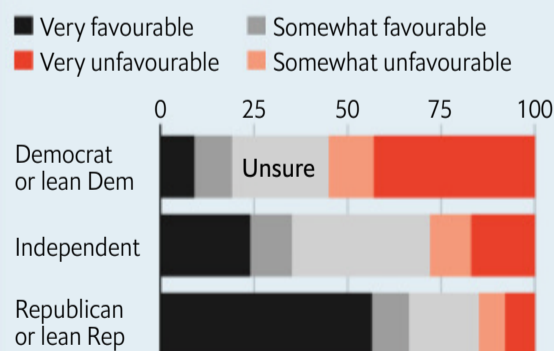
Extra curriculum

While progressivism may be increasing its reach within schools, CRT has hardly permeated state-sanctioned curriculums. American history textbooks are still mostly focused on the accomplishments of white men, says Patricia Bromley, a professor of education at Stanford University who analysed thousands of textbook pages. Recently Florida’s department of education rejected more than 50 maths textbooks (about 40% of those submitted for review) that the state claimed contained ▶▶

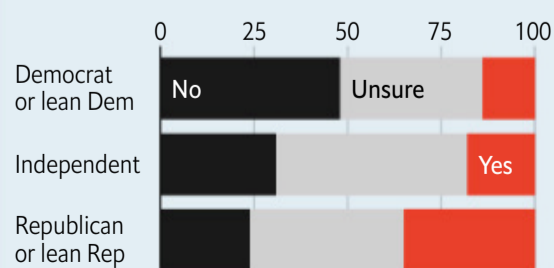
Theory and practice

United States, 2022*, % responding

“Many states have passed laws banning critical race theory in public schools. Do you have a favourable or unfavourable opinion of these laws?”



“Do you believe critical race theory is being taught in schools in your community?”



*Polls taken Feb 12th-15th, Mar 12th-15th and May 15th-17th
Source: YouGov/The Economist

► CRT or the like. Follow-up investigations found little mention of race or CRT in them. Curriculums have also grown less political. State standards have become more neutral over time, says Jeremy Stern, a historian at the Fordham Institute, an education think-tank.

What is really happening in schools, then? Largely an increase in availability of one-off courses on racism that pupils can elect to take. Seventeen states have increased teaching about racism and related topics through legislation. Many states insist that African-American or local indigenous history should be taught in schools, though pupils are not required to enroll. Connecticut (where 50% of public-school pupils are non-white) will require its high schools to offer African-American, Puerto Rican and Latino studies from this autumn. The 1619 Project is being taught in many districts despite outright bans in some states. Some changes, however, are mandatory. New Jersey and Washington passed laws last year requiring diversity-and-inclusion classes for pupils or training for staff—the kind of thing that critics see as vehicles for CRT.

Different schools of thought

California is the first state to mandate an ethnic-studies course, beginning with the high-school graduating class of 2029-30. The history course features the experiences of non-white communities (78% of California's public-school pupils identify as non-white). Two Stanford University studies found that the pilot programme in San Francisco improved attendance and graduation rates for Hispanic and Asian low-achieving pupils. The statewide programme has faced its fair share of controversy. Some Jewish groups felt that it did not focus enough on the Jewish experience or the realities of anti-Semitism. A revised version attempts to plug those gaps. Whether the programme can be successfully adopted statewide is unclear.

Is bringing such issues into the classroom a good or a bad thing? Americans' response, as on so much else these days, is polarised. The Understanding America Study, a nationally representative survey by the University of Southern California, found that most Democratic parents said it was important for children to learn about racism (88%), but less than half of Republican parents did (45%).

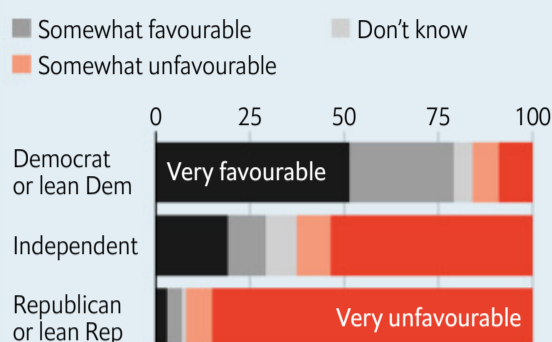
Many of the schemes described as CRT by conservatives (ethnic studies, social-emotional learning) were implemented so that pupils would feel represented in school. Black, Hispanic, Native American and some Asian pupils underperform overall compared with their white peers. These pupils form more than half of public-school enrolment in America.

California's ethnic-studies programme

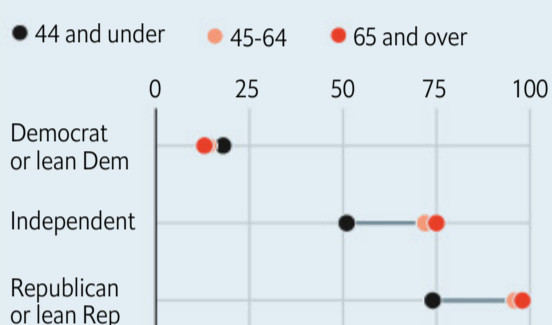
Critical mass

"Do you have a favourable or unfavourable opinion of critical race theory?", % responding*
United States, 2022[†]

By party



"Unfavourable", by age and party



*Asked of those who say they know what critical race theory is
[†] Polls taken Feb 12th-15th, Mar 12th-15th and May 15th-17th
Source: YouGov/The Economist

is one example of how learning about one's own ethnic history can improve pupil achievement. A study from the University of Arizona also found that participation in a Mexican-American history course was associated with higher standardised-test scores and increased likelihood of high-school graduation. Some researchers and educators consider coursework of this sort to be a key component for improving academic achievement.

If this flavour of critical race theory is beneficial, many pupils will never have a chance to find out. Anti-CRT laws have stoked much anxiety. Matthew Hawn, a white high-school teacher in rural Tennessee, was fired for showing a video about

Related podcast

Listen to our accompanying podcast series from Checks and Balance at economist.com/checkspod



white privilege and assigning an essay by Ta-Nehisi Coates, a writer on race relations, to his majority-white pupils. James Whitfield, a black high-school principal outside Dallas, Texas, resigned after being accused of "teaching CRT". (He sent an email offering his school community support after George Floyd's murder.) Some educators fear accidentally defying the law: the language is often vague and the consequences are severe. Punishment can include dismissal, fines or revocation of state funding for schools or districts, and potential lawsuits.

Not all school districts are concerned, though. "Urban districts are not feeling the heat," says Michael Hinojosa, superintendent of Dallas's school district in Texas, which is mostly black and Hispanic. "When you get out to the suburbs, that's where a lot of the vitriol is."

Many parents of school-age children today attended school in the 1980s and 90s when white pupils were the majority and diversity was less discussed. America has a history of responding poorly to social change in schools. Desegregation in the 1950s and 60s led to violent protests, as did busing—to bring black pupils to white schools—in the 1970s. In 1978, at the time of a growing gay-rights movement, a ballot initiative in California tried (but failed) to ban gay and lesbian teachers.

The battles over critical race theory could be the latest iteration. And although schools may be majority non-white, voters are older and whiter. *The Economist/YouGov* polling found that, though Democrats of all ages largely favour CRT as a concept, the vast majority of older Republicans and independents dislike it (see chart 2).

A sticky label

Some conservatives see opposition to CRT as a way to galvanise support for "school choice", a policy that allows public money to fund pupils in other public or private schools. The culture wars "could be extremely helpful for promoting school choice", says the website of the Heritage Foundation, a conservative think-tank. Advocates of school choice say it improves options, especially for non-white pupils who often attend under-resourced and underperforming schools. Others claim that school choice is really about racial segregation. The anti-CRT movement is about dismantling public schools, says Kimberlé Crenshaw, one of the foundational scholars of CRT as a legal theory.

The campaign against critical race theory has turned out to be remarkably sticky. "It is putting a name or acronym on a broad set of ambiguous anxieties around changing conversations on race, gender, woke," says Ms Longwell, drawing conclusions from her focus groups. "CRT has become a catch-all for that." ■

New York's graffiti revival

More writing on the wall

JAMAICA TRAIN YARD, QUEENS

Tourists are coming to the Big Apple to tag, sometimes at their peril

THE TEN-CAR subway train was adorned at the end of June in a tunnel in Queens. The artists appeared to use paint rollers to cover it along one side, from top to bottom, in an awful shade of pink (think Pepto-Bismol) with a brown line. "It was done quickly," speculates John Chandy, who works in the train yard in Jamaica, Queens. Tagging a train is often less about the art and more about the prize of marking something that entails risk and echoes the original graffiti writers, who blanketed subway trains, including the windows and seats inside, in the 1970s and 1980s.

Modern graffiti began in Philadelphia in the 1960s. But it became an art form in New York City, says Eric Felisbret, author of "Graffiti New York". "Graffiti benefited from the popularity of hip-hop globally," says Mr Felisbret. "Out of all the elements of hip-hop, graffiti is by far the most rebellious...Back then, all graffiti was illegal."

Many New York street artists have moved on to commissioned works—some younger ones have never created their murals illegally. Graffiti tourists are coming to New York for the bragging rights of tagging there. During the pandemic, some artists became brazen, painting buildings and walls even in the middle of the day.

In 2020 the Metropolitan Transportation Authority (MTA), which runs the subway, spent \$1.2m on cleaning. By the end of May this year it had already spent \$1.1m. In all of 2021, 681 subway cars were "vandalised". This year more than 700 cars have been. More than one in ten subway cars

had to be taken out of service for cleaning.

The recent spike in subway graffiti activity parallels the lifting of travel restrictions. The graffiti on trains usually gets cleaned or hidden quickly, so artists post images of their work on social media. Sharif Profit, who organises the annual Graffiti Hall of Fame in Harlem, says he can always tell when the work is by someone from another country: "It is not on the same level."

Tagging on the subway is dangerous. The live third rail is lethal and the tunnels are dark. Trains can appear with little warning, so trespassers may have no way of avoiding them. Two French graffiti artists were killed by a train in Brooklyn in April. "As soon as I heard where the bodies were found, I knew they were taggers," says Mr Felisbret. "It was just really incredibly heartbreaking."

The MTA removes any tagged train so as to avoid encouraging other people. Passengers then have to wait longer. That was the case recently, says Richard Davey, head of the MTA's New York City Transit system, when eight trains were vandalised. The resulting delays affected thousands of commuters. "It's our goal to make sure we don't return" to the 1970s, he says, "whether it's in our stations, on our cars." Graffiti on the subway began to die out in the late 1980s. One former graffiti writer said it is almost jarring to see tagging there now.

Passengers may not see much graffiti on the subway, but street art, murals and graffiti writing have become mainstream. Nike sells a graffiti trainer (no two shoes

are alike). Museums and galleries hold street-art exhibitions. Some initially unauthorised street art is protected, such as the Banksy image on West 79th Street, which is covered in Plexiglass. Not all graffiti tourists want to break the law. Some sign up for graffiti walking tours or workshops. Lauren Beebe, of Like A Local Tours, pairs groups with Brooklyn graffiti artists for a lesson. She says these are especially popular with corporate groups from France.

Erica Lynch, a subway cleaner, is not a graffiti fan. She started cleaning the graffiti on the train from the Queens tunnel at 4am. Four and half hours later she had finished a segment of the car just ten feet wide and three feet nine inches high. It was tough going. The pink paint did not want to come off. Ms Lynch uses tsw (This Stuff Works!), a product designed to take off graffiti. It is extremely potent and can damage skin and eyes on contact, so she wears protective gear. "I've seen good graffiti," says one of her colleagues, who grew up during its heyday in New York City, and here "you see a lot of bad." ■

The American economy

Recession-spotting

WASHINGTON, DC

Even if GDP shrinks, America may officially avoid a downturn. For now

EVERYONE KNOWS that recessions are painful. But what exactly are they? It is an abstruse but important question that may crop up in the coming weeks in America because of the oddly lopsided state of its economy. The popular definition of recessions, often cited by journalists, is two consecutive quarters of negative growth. On that basis America finds itself on the brink of one today. In the first quarter of 2022 the economy shrunk slightly. Some indicators, such as declines in homebuilding and in factory output, suggest that a mild contraction might also have occurred in the second quarter. If that is the case when GDP is reported on July 28th, the conclusion would seem to be straightforward: America is in recession.

But things are not that simple. Officially, the decision about whether or not the American economy is in recession belongs to the business-cycle dating committee of the National Bureau of Economic Research (NBER), a private, non-partisan research organisation. It is an eight-member group of macroeconomists including Robert Gordon of Northwestern University and Christina Romer of University of California, Berkeley. They consider a range of variables beyond GDP itself, from consump- ▶▶



There's good, there's bad, and there's pink

tion to industrial production, with a view to identifying downturns that are truly spread across the economy.

This analysis has on occasion led them to declare that the economy is in recession even when GDP is growing. America managed to avoid two consecutive quarters of negative growth in 2001, but the NBER boffins still deemed it to be a recession. What makes the present moment so unusual is that the NBER may, for the first time, come to the opposite conclusion: that the economy has avoided a recession despite consistently negative growth.

Some sceptics might sniff a political conspiracy in this—say, an attempt to prop up Joe Biden's beleaguered presidency. In fact, the reasoning is far more banal. When identifying business cycles in recent decades the NBER has put most weight on real personal incomes and employment figures, and both of these are so far holding up better than GDP growth. Real incomes (that is, adjusted for inflation) have indeed started to fall as soaring prices eat into wages. But job growth has remained remarkably strong. The economy created 372,000 jobs in June, bringing private-sector payrolls beyond their pre-covid level. This rebound from the depths of the pandemic stands as America's fastest labour-market recovery in more than three decades (see chart). An unemployment rate that is steady at about 3.6%, just shy of a seven-decade low, is simply not consistent with the notion that the economy is in recession. One possibility is that future revisions to data will show that GDP did actually expand in the first half of 2022.

All this may be cold comfort to Mr Biden. What matters most for voters is not a technical assessment of recession but their general perception of the economy. And that is rather poor. Consumer sentiment, as measured by surveys, has plunged. A poll in June from YouGov and *The Economist* found that 56% of Americans believed the economy was already in recession. It is no coincidence that approval ratings for Mr Biden have also fallen,

making him even more unpopular than Donald Trump at this point in his presidency. Hyper-partisanship explains much of the antipathy. Stubbornly high inflation is also a big factor, reducing what Americans can buy and making them feel poorer.

Some also dread what may lie around the corner. With inflation so persistent (and now at a 40-year high), the Fed has embarked on a course of monetary tight-

ening that seems destined to be its sharpest since the early 1980s. Increases in interest rates do not always precede recessions. But it will be a small miracle if America can absorb tightening of this magnitude without suffering a pronounced rise in unemployment. At least one group can count on job security: the eight who must identify peaks and troughs in business cycles. Their expertise will be in high demand. ■

Rest in pieces

Farewell to a bizarre landmark

Conspiracy theories about the Georgia Guidestones were common

GEORGIA HAS its share of controversial monuments. They include Stone Mountain, which has America's largest Confederate memorial carved into its side. And until last week the state was home to the Georgia Guidestones, often referred to as "America's Stonehenge" (not to be confused with an attraction with that name in Salem, New Hampshire). Located about 100 miles (160km) north-east of Atlanta, the 19-foot (six-metre) landmark had messages sandblasted onto its granite surfaces in a dozen languages, including English and Babylonian cuneiform. It also served as a sundial and an astronomical calendar.

In the pre-dawn hours of July 6th a shadowy figure, caught in a grainy image on camera, apparently planted an explosive device at the site of the Guidestones and damaged them. Authorities ordered the remnants destroyed, concerned that the unstable structure could collapse on investigators. They have yet to identify any suspects, but a local prosecutor described the attack as an "act of domestic terrorism". The perpetrators face a minimum of 20 years in prison.

Although the latest mystery is finding out who bombed them, the Georgia Guidestones have been an enigma since their inception. In 1979 a man using the pseudonym Robert C. Christian commissioned the monument on behalf of a "small group of Americans who believe in God". Many conspiracy theorists came to believe that the Guidestones were the work of an evil cabal bent on controlling the world: inscriptions on the stones included what seemed like commandments, such as "Maintain humanity under 500,000,000 in perpetual balance with nature".

Others simply saw the monument as a testament to the talents of the craftsmen of nearby Elberton, the self-proclaimed "granite capital of the world". Still others saw the Guidestones as nothing more than a wacky roadside curiosity.

Those who subscribe to sinister notions about the stones were once largely confined to the fringes. Now they can be found among politicians (many of whom have also embraced other conspiracy theories, including the idea that the 2020 presidential election was stolen). Earlier this year one candidate for governor made it part of her platform to destroy the "satanic" stones; Kandiss Taylor ultimately lost the Georgia Republican primary in May with only 3.4% of the vote, but the recent events have pushed her into the spotlight again.

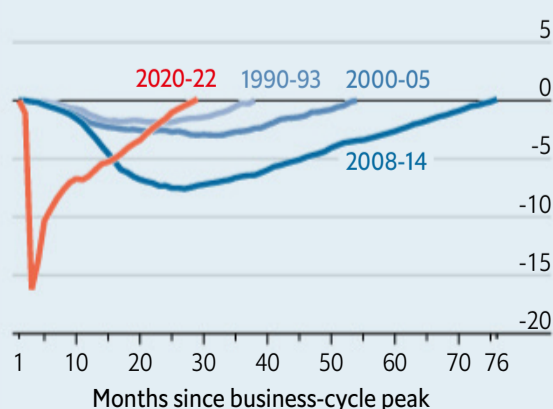
In an interview with Alex Jones, a notorious conspiracy theorist, Marjorie Taylor Greene, a controversial Republican congresswoman from Georgia, said that the stones called for "population control", a policy she linked to the "hard left". Whether or not the bomber of the Guidestones bought into such fantasies, the impact of the monument's destruction will be all too real. Elberton has lost its "Stonehenge"—and an eccentric tourist attraction that each year lured thousands of intrigued visitors from around the world.



Before the fall

V impressive

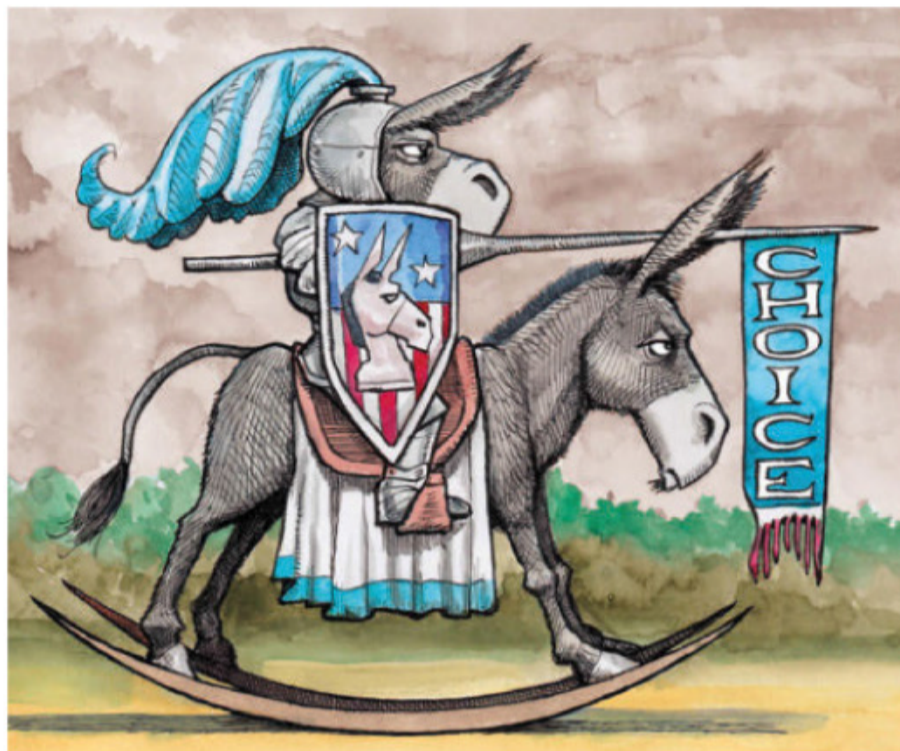
United States, private-sector employment
% change from business-cycle peak



Source: Bureau of Labour Statistics

Lexington | Democrats dither dangerously on abortion

The potential consequences of their lack of direction are evident in Nevada



THERE IS LOFTY talk these days, including by the Supreme Court majority that struck down the right to abortion, about how individual states, those laboratories of democracy, can now sort out the right answer to this vexing moral question. “I think the democratic process is going to work out at the state level,” said Mitch McConnell, the Senate Republican leader, recently.

This is a feint, ahead of the mid-term elections, by Republicans who know they’ve been dealt a weak hand, given broad support for abortion rights. A national law protecting abortion or banning it may not be inevitable. But a struggle to achieve one or the other surely is. The moral logic of the contending abortion movements can’t just stop, with a resigned shrug, at state boundaries.

It is one thing to set the speed limit at 75mph in Wyoming but at 65mph in California. Americans do not generally think the constitution guarantees that they can drive very fast. But if they believe that a basic right is at stake, how can they put up with it being denied to a woman in Oklahoma, or to a fetus in New York? That would require a contemptible indifference to the liberties of fellow citizens (which is why Mr McConnell, back in May, acknowledged that a national ban was possible). And given the uncertainty created by the patchwork of state laws—can emergency-room doctors in a state with a ban save a woman’s life by performing an abortion?—Congress has every reason to step in.

But despite having the better hand, Democratic leaders have no strategy for playing it. Their confusion and hesitation are all the more astonishing because they had ample warning from the leak of the draft court decision in May. Joe Biden’s White House and abortion-rights activists have taken to publicly bickering over steps they could have planned months ago.

Away from Washington, DC, some Democrats were better prepared. In Nevada, for example, Senator Catherine Cortez Masto was ready to roll out events to alert her constituents that they risked losing their abortion rights. Abortion in Nevada is protected up to 24 weeks of pregnancy by a referendum, passed in 1990, that the state legislature cannot touch. But Congress can. The Democrats’ majority in the Senate is just one vote, and Ms Cortez Masto is seen as the most vulnerable Senate Democrat this year. “This race itself is going to make the determination as to whether

or not we have a federal abortion ban,” she says during a stop at a Las Vegas Teamsters hall. “There’s no doubt in my mind my opponent Adam Laxalt would support it.”

Like Ms Cortez Masto, Mr Laxalt is a former state attorney-general, albeit one who used his lawman credentials to back Donald Trump’s lies about the 2020 election. Mr Laxalt has said he is pro-life because he was born out of wedlock to a woman in her 20s. (The story gains some nuance from the disclosure, just before Mr Laxalt entered politics, that his father was then-Senator Pete Domenici of New Mexico, a Republican ally of his grandfather, Senator Paul Laxalt of Nevada. His mother, Michelle Laxalt, became a successful Washington lobbyist.) Mr Laxalt did not want to talk about abortion or anything else when Lexington approached him at the Independence Day parade in Boulder City. “I’m not going to do this right now,” he said.

His campaign says Ms Cortez Masto is fearmongering. But one lesson of recent American political history is that fear is prudent. Mr Laxalt has called the state’s abortion protections “settled law”, language echoing that once used by certain conservative judges about *Roe v Wade*, the ruling they would go on to overturn. He has supported holding a new referendum to narrow the legal window for abortion to 13 weeks of pregnancy.

Local news outlets in Nevada are already reporting on women forced to travel there for abortions from states with bans or severe restrictions, and an abortion-rights group is pounding Mr Laxalt with advertisements (“He’s coming after our freedom”). But Mr Biden’s unpopularity, high prices for food and petrol, rising crime and turmoil at the southern border are all weighing on Ms Cortez Masto’s candidacy. Mr Laxalt is trying to keep the focus on those issues. Mr Trump came to Las Vegas on July 8th to make the case—with characteristic absurdity and, for Republicans, effectiveness—that Nevada is “a cesspool of crime” and that Ms Cortez Masto is “an open-borders fanatic”.

Even in a pro-choice state like Nevada, threats to abortion rights may not overcome the Republican advantage on pocket-book concerns. A more robust fight might be possible if the White House and Congress weighed in with more than Democratic oratory and dead-end ideas about the emergency created by the court. So far, Democrats in Congress are still debating what to do.

Progress v perfection

Instead they should be holding many more votes on bills like one proposed on July 12th by Ms Cortez Masto and some colleagues, to protect women who travel for an abortion from prosecution at home. They could also be holding votes on related matters like increasing funding for neonatal care and pre-school education, to demonstrate which party is really focused on the family.

A more controversial step would be to try to set a national floor, protecting abortion in cases of incest or rape or when a mother’s life is at risk. Some abortion activists are worried about giving moderate Republicans a chance to look reasonable by supporting such a bill. And they resist any abortion-rights measure that falls short of restoring the full protections of *Roe*. But more incremental bills would save lives if they passed, and expose Republicans’ radicalism if they didn’t. The Democrats need to recapture the pragmatic, fighting spirit of Harry Reid, the former majority leader who once held Ms Cortez Masto’s seat. As Barack Obama put it while eulogising Reid in January: “In a battle between perfection and progress, Harry always chose progress.” Right now, Democrats are achieving neither. ■



Brazil

Might Bolsonaro try to steal the vote?

President Jair Bolsonaro says he can only lose an election in October if it is rigged

THE DAY after Donald Trump urged a mob to storm the Capitol in Washington and overturn an election result that displeased him, Brazil's president issued an ominous warning. Jair Bolsonaro, a man sometimes called the "Trump of the tropics", suggested that he, too, doubted that his own country's elections were fair. "If we don't have...a way to audit the votes, we will have bigger problems than the United States," he told supporters.

The votes he was referring to will be counted in October, when Latin America's biggest democracy holds its most consequential election in decades. It will pit two

political heavyweights against one another: Mr Bolsonaro, a former army captain who celebrates Brazil's old military dictatorship, and Luiz Inácio Lula da Silva, a former metalworker who served as president between 2003 and 2010.

At the previous election, in 2018, a jail sentence for corruption prevented Lula from competing. Mr Bolsonaro defied the odds (and a stabbing) to win. But the polls

say he is unlikely to win again. This time Lula leads by double digits.

Mr Bolsonaro is in a bind. He can no longer claim to be a political outsider. And he is a less plausible crusader against corruption, after three and a half scandal-plagued years in office. As hunger rises to levels not seen for decades, many voters will remember that Lula's policies (hatched during a commodity boom), once helped fill their bellies. Few will forget Mr Bolsonaro's mismanagement of the pandemic, which left over 660,000 dead.

Populist playbook

No incumbent likes to entertain the possibility of defeat. Mr Bolsonaro fumes that if Lula wins, Brazil will become another Venezuela, an undetachable "wagon on that train" of Latin American socialism, as he recently told Tucker Carlson, a pro-Trump American broadcaster. This is a stretch: Lula is of the democratic left, far removed from the brutal, incompetent socialists running Venezuela.

Some suspect that Mr Bolsonaro is afraid. Losing the presidency would mean losing presidential immunity, along with control over the federal police. This would expose him to myriad lawsuits and threats of criminal prosecution for such things as misuse of public funds (which he denies). "I have three alternatives for my future: being arrested, death, or victory," he said last August. (After thinking for a bit, he later ruled out the first option.)

With the odds against him if he plays by the rules, the president is trying to re-write the rulebook. On July 13th his allies in Congress pushed through a constitutional amendment allowing the government to exceed previous limits on spending in an election year. That will let him launch new welfare schemes and expand popular existing ones just before the vote. He is also sowing doubt about the electoral process. He tells supporters he can only be defeated if the contest is rigged. This suggests he may dispute the result if he loses. What is unclear is how far he might go, and who might support him if he plays dirty.

Brazil's electoral system is centralised. In the United States Mr Trump filed over 60 lawsuits and tried to intimidate local electoral officials into "finding" extra votes for him. Such tactics would not work in Brazil, where since the 1940s elections have been organised and adjudicated by independent electoral courts. Their highest body is the Superior Electoral Court, or the TSE in Portuguese. This handles everything related to presidential elections. Seven justices, including three from the federal Supreme Court, serve two-year terms.

The system they oversee generally runs smoothly. Voting is compulsory for adults under 70 and optional for 16- and 17-year-

→ Also in this section

41 Bello: Migration in the Americas

► olds. Citizens choose their president, governor and other elected officials all by entering numbers onto an electronic ballot. If in the first round no candidate receives more than 50% of unspoiled ballots, a runoff between the two leading candidates is held four weeks later. If no irregularities are found the TSE confirms the winner's victory with a certificate that is then formally presented to Congress.

Suppose Mr Bolsonaro were to lose, what then? He would have several weeks before he had to hand over the presidential sash on January 1st. He could legally challenge the result through the TSE. Two classes of action can be brought to a justice's desk, explains Henrique Neves, a former judge on the court. The first, an action for an electoral judicial investigation, can be filed before the election, and generally relates to campaigning irregularities.

The second, more serious action is a challenge to an electoral mandate. The Brazilian constitution says that a mandate can be formally investigated if there is evidence of economic abuse (such as illegal electoral spending), corruption (such as buying votes), or fraud (ballot-box tampering and the like). This must happen within 15 days of the winner being certified in December. If significant foul play is found to have occurred, the result could be overturned and a new winner declared. Such proceedings would involve a huge cast of characters. Other political parties could provide evidence. The chief public prosecutor, Augusto Aras, an ally of Mr Bolsonaro, could offer a legal opinion. But the final decision would lie with the TSE and with the federal Supreme Court.

Historically such challenges are rare in presidential elections (albeit common in municipal ones). The TSE opened its first action to challenge the electoral mandate of a sworn president in 2014, after the opposition disputed the mandate of Dilma Rousseff, Lula's successor. Still, it proceeded cautiously, delaying any judgment against Ms Rousseff until Congress impeached her on separate charges. The complaints of Lula's Workers' Party that fake news influenced the outcome of the election in 2018, which Mr Bolsonaro won, also went nowhere. The courts will not nullify results without strong evidence of wrongdoing, says Alexandre Rollo, an expert in electoral law. They are unlikely to disqualify the winning candidate.

Mr Bolsonaro may not wish to rely on the courts alone. His relations with judges are not always cordial. In April he pardoned a deputy who threatened to throw a Supreme Court judge in a rubbish bin. The president refers to Edson Fachin, the head of the TSE, as "the one who got Lula out of jail" (at the Supreme Court Mr Fachin annulled Lula's convictions on procedural grounds after it transpired that he had

been tried in the wrong court). On July 7th Mr Bolsonaro insinuated that Mr Fachin "already knows" the outcome of the election. He peddles such twaddle while insisting that Brazil's electronic-voting system is susceptible to fraud. The system has been used in Brazil since 1996 with no evidence of irregularities. His legal team has yet to substantiate Mr Bolsonaro's claim. He is being investigated for making it.

It may be harder for Mr Bolsonaro than it was for Mr Trump to persuade lots of people that a fair election was "stolen". He cannot claim his opponents have unfairly tinkered with rules for postal ballots, because Brazil has no postal ballots, notes Anthony Pereira, a Brazil-watcher. His proposal to introduce a paper audit trail was rejected by Congress. In May 73% of Brazilians said they trusted the electronic ballot.

Yet he has forced the electoral court onto the defensive. In the eight months to May 2022, the cyber-defence wing of the armed forces submitted 88 questions about supposed vulnerabilities in the electoral process, many echoing Mr Bolsonaro's talking points. The armed forces' role in elections is usually restricted to transporting ballot boxes and protecting voters from thugs. This year the TSE invited the top brass to be part of a "transparency commission" in order to counter allegations that the body is too secretive. But according to *O Estado de S. Paulo*, a newspaper, they are now planning their own election-monitoring process which involves testing ballot boxes and verifying the vote count.

Mr Bolsonaro appears bent on undermining trust in democratic institutions. Before the last election, his supporters energetically spread fake news about his opponents. Since then the pro-Bolsonaro parallel news universe has expanded. On WhatsApp and Telegram the president's fans dismiss pollsters as propagandists and share unscientific surveys. Websites

spreading disinformation are "popping up like gremlins", says Patricia Campos Mello, a journalist who recently won damages from Mr Bolsonaro after he suggested that she offered sex to a source. More than a third of Brazilians think there is "a big chance" the election will be rigged, says Datafolha, a pollster the *bolsonaristas* hate.

Mr Bolsonaro's jousts with the judiciary and the media coincide with overreaches in the legislature. There he has won over politicians by doling out ministerial jobs and slices of a "secret budget", made up of opaque grants awarded to lawmakers, which amounted to R\$4.9bn, or \$910m, in June. That same month senators narrowly avoided passing a provision to the constitutional amendment that could have given the president broad emergency powers over policies such as welfare payments (as it is, Mr Bolsonaro now has an extra \$8bn to spend). The text was snuck into a version to be voted on that day, and only noticed by the opposition at the last minute.

Play fair, Jair

Beatriz Rey, a visiting fellow at Johns Hopkins University, likens this move to the autocratic tricks of Viktor Orbán, the strongman prime minister of Hungary. This is a stretch. Mr Orbán, whom Mr Bolsonaro met this year, has comprehensively nobbled his country's courts and media, and successfully tilted the electoral playing field in his own favour. Mr Bolsonaro has not been able to do any of these things.

Nonetheless, his opponents fear that if the vote is close, he may claim he was robbed of victory and try to cling on by foul means. He might try to rouse an insurrectionary mob, as Mr Trump did last year. He might inspire a mutiny within the military police or army. He could even attempt a coup. The last option is extreme, but Brazil only emerged from a military dictatorship in 1985, and Mr Bolsonaro has waxed nostalgic about the good old days when the men with guns called the shots. "Any Brazilian who is not worried is not paying attention," says Wallace Corbo of the Getúlio Vargas Foundation, a think-tank.

Brazil has never truly grappled with its dictatorial past. Some within the army still believe they have a duty to intervene to "safeguard" democracy. Mr Bolsonaro's running-mate, Walter Braga Netto, a retired general, has at times used menacing language. "Either we have clean elections, or we won't have elections," he said last year. In the United States, no one thought the army would back Mr Trump's coup attempt. In Brazil, some people are not sure what the top brass might do.

Others are more sanguine. "I don't think that the military would be prone to do any political adventure to defend [Mr] Bolsonaro," says Vinícius de Carvalho of King's College London. Conditions are very ►►



Bello On the move



Migrant flows are changing. A new declaration may help manage them

THE DEATHS last month of 53 migrants from asphyxiation in a trailer outside San Antonio in Texas were a horrific reminder of the risks people take to enter the United States illicitly. All the dead were from places that have long supplied many migrants: 27 were Mexicans; the rest were from Central America.

Yet across the Americas people are on the move in new ways as well as old. Groups of Haitians now congregate in cities from Mexico to Santiago. Venezuelans deliver meals on bikes in Lima and Bogotá. More than 150,000 Nicaraguans have sought refuge in Costa Rica. A similar number of Cubans have left their island in the past year. The trackless jungle of the Darien Gap was once an impassable barrier between South and Central America. Last year, says Panama's government, more than 130,000 people trekked through it.

Blame, in part, the impact of the pandemic and a rise in the number of failing states. A falling birth rate and faster economic growth meant that for several years more Mexicans came home than moved north. Now the pandemic slump and criminal violence, as well as the booming labour market in the United States, are once again prompting many to emigrate. Much the same applies to Central America's Northern Triangle of Guatemala, Honduras and El Salvador.

The figures are distorted by Title 42, a public-health measure imposed during the pandemic by Donald Trump under which migrants are pushed back over the United States border, rather than processed or arrested. This has had the unintended consequence of encouraging Mexicans in particular to make repeated attempts to cross. Even so, roughly half of border "encounters" reported by US Customs and Border Protection in April

and May involved people not from Mexico or the Northern Triangle.

Since 2015 some 6m Venezuelans have fled economic meltdown and dictatorship, mostly moving within South America. Some are starting to return, as Venezuela's economy revives modestly. But now Cubans and Nicaraguans are fleeing their failed leftist dictatorships. And the pandemic seems to have prompted Haitians who had emigrated to South America a decade ago to head to the United States.

All this adds up to a headache for governments. It is stimulating new thinking, as last month's Summit of the Americas in Los Angeles showed. The gathering was marked by controversy: six leaders stayed away, including Mexico's President Andrés Manuel López Obrador, because President Joe Biden did not invite the rulers of Cuba, Nicaragua and Venezuela. Yet more important was what was agreed. The Los Angeles declaration on migration, signed by 21 countries, is a first effort to set out some common approaches. These include promises to expand legal migration and to revamp asylum procedures.



Traditionally, debate about migration was polarised between sending and receiving countries. The declaration "created a common language" for the first time, says Andrew Selee of the Migration Policy Institute, a think-tank. It could mobilise additional funds from development banks to help countries like Colombia, Costa Rica and Ecuador which are regularising migrants. Many countries worry about what to do with people who cross several borders, says Mr Selee. New aid might help to screen refugees from economic migrants before they reach the Darien Gap, for example. Mr Biden's people stress the importance of tackling "the root causes" of migration with development aid and by fighting corruption in Central America, though there is little to show for this so far.

Despite Mr López Obrador's absence from Los Angeles, Mexican officials claim credit for the declaration as "co-architects", as one puts it. Partly because of Mr Trump's bullying, Mexico has adopted what its president's critics see as the role of America's gendarme, deploying its National Guard to deter migrants at its southern border. But the official says that Mexico is trying to apply its own laws and control who enters its territory, while maintaining a humanitarian policy. He points out that it has given visas to "hundreds of thousands" of Haitians and Central Americans.

That is why it wants other countries to take some of the strain. At a meeting in Washington this week, Mr López Obrador pledged \$1.5bn in border infrastructure. He also urged Mr Biden to issue more visas for legal migrants. A big unknown is whether a future Republican administration would continue this approach, or go back to Mr Trump's border wall. That might be a conversation-stopper.

▶ different from 1964, when the army last took power. Then it had the support of business and media elites, the United States and the *centrão*, a posse of pork-barrel politicians. It is difficult to imagine any of these groups backing a coup now. Most of the president's supporters do not support the idea, either.

A bigger risk is a split within the armed forces, suggests Mr Carvalho. In 1964 it was a three-star lieutenant-general who started the coup, not a four-star general, he notes. Analysts also look to the military police, who outnumber Brazilian soldiers. Many

support Mr Bolsonaro. It is possible that some could join in protests if he loses, or refuse to quell pro-Bolsonaro rioters.

This is the most likely outcome. This election has much in common with some of Latin America's explosive electoral disputes of recent years, notes Ivan Briscoe of Crisis Group, a think-tank. "The people are ready to fight for democracy," says José Carlos Bernardi, a journalist who supports Mr Bolsonaro. On July 9th a federal prison guard shouting pro-Bolsonaro statements shot and killed a Workers' Party activist. The president condemned the murder, but

supporters remain bellicose. Some fear there could be an attempt to stop the elections on September 7th, which marks 200 years of independence from Portugal.

There is another way things could pan out. If Mr Bolsonaro were to lose, he could negotiate his departure in exchange for immunity, in what political scientists call a "pacted transition". This is how the military regime ended. If no one ends up being held accountable, few would be pleased. But it is a sad indictment of Brazil under Mr Bolsonaro that this may be the country's least dangerous option. ■

**ECONOMIST
IMPACT**

How will world-wide trends continue to set the treasury agenda?



The 31st annual
**EuroFinance International
Treasury Management**
September 21st-23rd 2022 | Messe Wien, Vienna

Return to in-person collaboration and join more than 2,000 attendees at the world's largest and most influential treasury event. Further your strategy in informative sessions held live in Vienna, led by more than 150 world-class speakers including:



Mack Makode
Treasurer,
Under Armour



Mandana Sadigh
Corporate treasurer,
Mattel Inc.



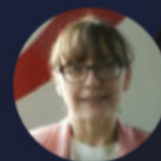
Connie Miner
Assistant treasurer,
News Corp



Mario Del Natale
Treasury director, global
digital treasury,
Johnson Controls



Yang Xu
SVP, global finance
and treasurer,
Kraft Heinz



Kiera Agnew
Assistant treasurer,
Kellogg Company

Early bird rates end on July 29th. Register today:

www.eurofinance.com/international

Official lead sponsors

J.P.Morgan



BANK OF AMERICA



FitchRatings





Japanese politics

Staying the course

NARA AND TOKYO

Abe Shinzo's policies will live on, but may be enacted more slowly

ABE SHINZO was killed at a crossroads. The former Japanese prime minister stood in the middle of an intersection just north of the train tracks in Nara, an ancient capital in the country's west, where pedestrians and buses approach Yamato-Saidaiji station. He was partway through a stump speech for a candidate from the ruling Liberal Democratic Party (LDP), to which he belonged, early on July 8th when a man in a grey polo shirt approached from behind and fired a homemade gun.

The killing shocked Japan. Gun violence is exceedingly rare: the country saw just one gun death in all of 2021. Political violence, too, has been virtually unheard of in recent years. Mr Abe had already earned the historic distinction of being Japan's longest-serving premier, over two stints in office from 2006 to 2007 and from 2012 to 2020. The assassination made him the only Japanese head of government to be killed during the post-war era. Five days after his death, tearful mourners were still lined up at the site of the shooting to pay respects, leaving flowers and handwritten notes. "I couldn't believe it," says Shida

Michiko, who was among the well-wishers gathered there. "I couldn't stop crying."

Mr Abe's death leaves his country at a crossroads, too. In addition to being Japan's longest-serving leader, he was its most consequential politician in decades. Even after stepping down, the course Mr Abe set remained Japan's default—in domestic matters, but especially in foreign and security policy, where he sought to counter China's rise by strengthening Japan's own defences, reinforcing its alliance with America and building ties with other regional powers (see *Banyan*).

Out of office, as the head of the LDP's largest faction in parliament Mr Abe exerted more than enough influence to push Kishida Fumio, the current prime minis-

ter, farther along that path. The question is whether his killing "will come to be seen as a turning point in Japanese political history" or whether it ends up "just having been an incident", says Gerald Curtis of Columbia University.

Much will depend on how Mr Kishida responds. Voters gave the LDP a thumping victory in upper-house elections that went ahead as planned on July 10th. Along with its smaller partner, Komeito, the party secured 76 of the 125 seats up for grabs. Mr Abe's death seems to have had little impact on the result: the LDP was already expected to ride to victory. Turnout was only a shade higher than in the previous such vote—hardly an outpouring of sympathy. Mr Kishida now has up to three years before he must face voters again.

Mr Kishida seems unlikely to reverse course entirely. But he may step back from some of Mr Abe's most hawkish policies. He belongs to a moderate faction of the party. Without Mr Abe around, "his dovish policy DNA" may come out, reckons Toshikawa Takao, the editor of *Insideline*, a political newsletter.

Yet he could just as soon accelerate along the path Mr Abe laid. Conservatives are sure to use Mr Abe's death to highlight the need for the kind of security policies he championed. Mr Kishida may countenance or even accede to such cries, accepting more spending on a beefier army and perhaps even a revision of Japan's pacifist constitution, a charged issue and Mr Abe's lifelong goal. "Kishida may not jump on ▶▶

→ Also in this section

44 **The fall of the House of Rajapaksa**

45 **An ugly squabble in the Pacific**

45 **A defenestration in South Korea**

46 **Banyan: Abe's geopolitical legacy**

▶ that bandwagon, but he may not be powerful enough to slow it down,” says Mr Curtis.

The likeliest scenario, however, is that Mr Kishida sticks to Mr Abe’s direction, but moves at a slower pace. When it comes to Japan’s strategic choices, “stay the course” is the “only option the Kishida administration can have, and they are well aware of this”, argues Funabashi Yoichi of the Asia-Pacific Initiative, a think-tank in Tokyo. In addition, the “centre of gravity of public opinion has shifted” towards support for a stronger, more muscular Japan, says Richard Samuels of MIT.

At the same time, Mr Abe’s death will upset the balance of power inside the LDP. His absence is likely to unleash factional infighting that will impede change. No one in the party, including Mr Kishida, can match Mr Abe’s network of relationships with world leaders. Although Mr Kishida supports revising the constitution, it is nowhere near the priority it was for Mr Abe; he is more likely to expend political capital on domestic economic issues. Nor does he have much appetite for Mr Abe’s newer causes, such as asking for a say for Japan regarding the nuclear deterrent America wields on its behalf.

The wider societal impact, too, may prove less than initially feared. Mr Abe’s killing revived unsettling memories of political violence in the run-up to the second world war and amid fierce debates about security policy in the 1960s. Lots of people had opposed Mr Abe’s efforts to beef up Japan’s armed forces, so it seemed plausible that his assassination might have been intended to change politics.

But as details about the killer emerged, Mr Abe’s death has come to look more like an isolated murder than the opening shot in a campaign of political violence. Yamagami Tetsuya, the shooter whom police arrested at the scene, reportedly told investigators that he was not motivated by politics, but by a grudge against the Unification Church. His mother is a member and apparently made large donations to the church. Many conservative politicians, including Mr Abe, have courted its support. Mr Yamagami seems to have worked alone. There is little resemblance to the political turbulence of the 1930s, says Fujiwara Kii-ichi of the University of Tokyo.

Since the end of the second world war, Japanese have seen their country as safe. That confidence has been weakened in recent years—by China’s aggression, by the pandemic, by Russia’s war in Ukraine. Mr Abe himself was acutely aware of such insecurity: in an interview with *The Economist* in May, he urged Japan to discard its tendency to “speak about an ideal world”. In that context, his killing may fuel anxieties. If nothing else, Japan’s leaders are unlikely to be found meeting voters, exposed, in the middle of a road. ■



Sri Lanka’s crisis

Gota goes

COLOMBO

The president flees, leaving a country in chaos

IN THE END the mighty ex-military man cut a pathetic figure. First Gotabaya Rajapaksa fled the official presidential residence before it was taken over (pictured) by tens of thousands of angry Sri Lankans who had come to Colombo on July 9th to chase him from office. Then he spent days in hiding to avoid their wrath. Finally, in the early hours of July 13th, the disgraced president was spirited out of the country on a military jet. Gota, as he is known, flew to Malé, the capital of the Maldives, though there were rumours that he wanted to travel on to another country. As *The Economist* went to press on July 14th, journalists in the Maldives were reporting that he was on his way to Singapore.

Gota’s departure marks the end of his family’s two-decade domination of politics on the island of 22m people. Most Sri Lankans considered it long past time. But it also leaves the country with a political vacuum. Ranil Wickremesinghe, the prime minister who has taken charge in the president’s absence, is deeply unpopular and tainted by his association with the Rajapaksa clan. Calm seems unlikely to be restored while he remains in post.

The situation is complicated by the president’s unwillingness to relinquish power even from without. Gota used his executive powers to commandeer the plane that took him to the Maldives, and did not resign, or make arrangements for his resignation, before fleeing, presumably to avoid losing his immunity from

prosecution. (He has been accused of corruption in presiding over Sri Lanka’s economic collapse and of crimes committed during the country’s 26-year civil war, both of which he denies.) He has not spoken in public since leaving his residence. A promise that he would resign by July 13th was relayed through the speaker of Parliament, a political ally. Mr Wickremesinghe had also promised to resign as prime minister once an agreement to form an all-party interim government was in place.

By the morning of July 14th, no resignations had been forthcoming. The previous afternoon Mr Wickremesinghe, now acting as president, imposed a national curfew. The speaker issued a statement that the president had appointed Mr Wickremesinghe to act in his stead while he was overseas, suggesting that Gota was not in fact planning to step down. Even though the speaker later assured the public that he would, the dithering did not go down well with Sri Lankans. Reports that the prime minister had taken over sparked anger on social media and on the streets. Protesters stormed Mr Wickremesinghe’s office and attempted to take over Parliament. At least one person died and dozens were injured in clashes with security forces, who met the protesters with tear gas and batons.

Later in the day, Mr Wickremesinghe said he had asked the speaker to nominate a prime minister who would be “acceptable” to both government and opposition parties. The new prime minister would lead an all-party interim government to run the country until elections can be held. That government would also manage negotiations on a bail-out with the IMF, a matter of utmost urgency if the economy is to get back on its feet. Sri Lanka defaulted on its foreign debt in May. It has no foreign currency to pay for imports, resulting in an acute shortage of fuel, food and medicines. Fuel is being rationed to preserve essential services, and people are waiting days in queues at petrol pumps. There is still not enough to transport food to cities.

Yet the political stability needed to make progress on a deal remains elusive. A meeting of party leaders on July 13th failed to yield an agreement on how to form the new government. Unless the president resigns, Parliament cannot elect a new one on July 20th, as had been announced earlier in the week. The old guard’s insistence on clinging to power is radicalising the protest movement, where leftist former militants are becoming worryingly dominant. The Bar Association of Sri Lanka, which supports the protesters, called on them to respect the rule of law and stop their attacks on government buildings, warning of “lawlessness and anarchy”. Unless the impasse is resolved soon, that is what Mr Wickremesinghe may find himself presiding over. ■

Micronesia and its neighbours

Politics takes atoll

The Pacific Islands Forum is derailed by a high-profile withdrawal

WITH A SWIPE of a pen in 1832, Jules Dumont D'Urville, a French explorer, divided the islands of the Pacific into Micronesia, Polynesia and Melanesia. He named one group after the smallness of its various land masses, another after its multiplicity of islands and a third after its inhabitants' higher levels of melanin ("mela" is Greek for "black").

Nearly two centuries later, these labels are still causing arguments among the countries those islands have become. At this year's gathering of the Pacific Islands Forum (PIF), a regional body, proceedings have been dominated by the question of whether Micronesian states—Kiribati, the Marshall Islands, the Federated States of Micronesia (FSM), Nauru and Palau—will leave the forum because of a sense that they are not being given their due.

Micronesian countries have long felt marginalised in PIF. That is partly because of history and partly because of size. The body was established as the South Pacific Forum in 1971 to provide a political hub for newly independent Pacific states. It did not rename itself until 1999, well after the five Micronesian states, which are mostly north of the equator (see map), had joined. Their combined population of just 300,000 is equivalent to a mere 1% of that of Australia and New Zealand, the forum's heavyweights. Papua New Guinea and Fiji are the other hefty members.

On July 9th, two days before the summit kicked off in Suva, the capital of Fiji, David Kabua, the president of the Marshall Islands, dropped out because of legal complications that led to his country leaving the PIF. The same day Taneti Maamau, Kiribati's president, announced that his country had "taken the sovereign decision to withdraw from the Pacific Islands Forum with immediate effect".

The trouble began in February 2021 when Henry Puna, a former prime minister of the Cook Islands, was selected as PIF's new secretary-general, edging out the Marshall Islands' man by nine votes to eight. The five Micronesian members claimed that appointing a Cook Islander, from Polynesia, was in breach of a gentlemen's agreement that the position would rotate among the three subregions. They gave notice of their intention to leave the forum in February this year.

Ever since, other PIF governments have been working behind the scenes to heal the

rift. Earlier this year FSM claimed to have obtained an undertaking that Mr Puna would step down in June. In response, the Micronesian countries agreed to suspend plans to withdraw.

Mr Puna did not step down. Instead, David Panuelo, FSM's president, last month signed a compromise agreement with Frank Bainimarama, Fiji's prime minister and this year's PIF chairman. The gentlemen's agreement would be formalised, an additional deputy secretary-general position would ensure better representation of all three regions and the Office of the Pacific Ocean Commissioner would be moved from Suva to Micronesia.

Yet the deal failed to fulfil the Micronesians' main demand: that Mr Puna step down this year. Instead, he will complete his term and then hand the reins to a Micronesian replacement in 2024. Kiribati's president complained that all the Micronesian leaders should have been consulted about the deal. The Marshallese president, for his part, intended to withdraw his country's notice of withdrawal, but domestic squabbles blocked him from so doing, leaving the Marshall Islands formally outside PIF. The dispute is likely to drag on for another year.

The drama comes at a time of heightened anxiety for PIF. This is the first in-person meeting of leaders since 2019. A new, environment-friendly government in Australia offers a chance to establish a common front on climate change—a vital issue for the region, but one which was neglected by the previous prime minister in Canberra. And a controversial bilateral security deal between the Solomon Islands and China, signed in April, has Pacific-island countries worried about great-power games in their backyard.

The Solomon Islands and Kiribati cut diplomatic ties with Taiwan in 2019 and initiated them with China instead. Anote Tong, a former president of Kiribati, thinks that his successor is cooking up a deal with China. The summit presented a chance to explore regional approaches to security concerns. But until PIF can resolve its internal power struggles, dealing with external challenges will be a tall order. ■



South Korea

The way the wind blows

SEOUL

Intra-party feuding is making an unpopular president's job even harder

AS WITH MANY millennials, the soundtrack to Lee Jun-seok's life features songs from 1990s Disney films. On July 8th the chairman of South Korea's ruling People Power Party (PPP) posted a link to a song from "Pocahontas", an animated film, on social media. With lyrics like "How high does the sycamore grow? If you cut it down then you'll never know", it is Mr Lee's go-to tune when he is feeling the political heat.

Never has it been hotter than on that day, when his membership of the party was suspended for six months after a PPP ethics committee ruled that Mr Lee had failed to uphold the "dignity of the party". Kweon Seong-dong, the party's leader in parliament, will act as chairman.

At the end of last year a right-wing YouTube channel known for spreading salacious rumours about celebrities and politicians alleged that a businessman had arranged sexual services for Mr Lee in 2013 (Mr Lee denies it). But it was not the accusation of impropriety that got him suspended. Rather it was the claim that Mr Lee asked Kim Cheol-geun, his political-affairs chief, to promise a 700m won (\$537,000) investment to a witness to buy his silence (which they both deny).

Mr Lee is a controversial figure, both within and outside the PPP. At only 37 he is the youngest-ever leader of a South Korean party. He has won fans among young men frustrated at their unsatisfactory careers and romantic prospects. Mr Lee has soothed their egos with his claims that feminism is "blowfish poison" and that men are victims of reverse discrimination. That in turn secured their support for the PPP, which was badly damaged after its previous president, Park Geun-hye, was impeached in 2017 for corruption.

Mr Lee's ability to woo that constituency is seen as crucial to the three electoral victories the party has won in the past three years, including for the presidency, which its candidate, Yoon Suk-yeol, secured by a narrow margin in March. Unsurprisingly, Mr Lee's rhetoric sticks in the craw of young women, who earn less than their male counterparts, do far more housework and rarely get appointed to top jobs. South Korea sits at the bottom of *The Economist's* glass-ceiling index, which measures the role and influence of women in the workforce in 29 countries. Young people were divided sharply by sex in the presidential election. Some 59% of men ▶▶

▶ voted for Mr Yoon while a similar share of women voted for his main rival.

Mr Lee also has a record of annoying people in his own party. Almost as soon as Mr Yoon was named the party's presidential candidate, the two clashed over policy and tactics, including how Mr Yoon's campaign should be run. Their struggle over who controls the party has continued to simmer away in the background, and Mr Lee's announcement last month that he intended to reform the way that the PPP selected candidates for elections further angered the party's grandees. Some suggest

that bigwigs in the party have deemed him *tosagupeng*—a hunting dog that is eaten after it has caught the rabbit. With no election on the horizon until 2024, there is a risk that Mr Lee is found to be surplus to requirements.

Incensed, Mr Lee has taken to social media to encourage his fans to join the party, in the hope of convincing the acting leadership that he is indispensable. He has also said that he has “no intention” of stepping down. He has argued that the party's bylaws mean that the ethics committee's ruling should not come into force for ten

days, and that its decision requires his sign-off as party chairman to be valid.

For Mr Yoon, the fracas is a distraction and a headache. His approval rating has steadily dropped since his election. Twice as many South Koreans think he is doing a bad job as think he is doing a good one. Getting the political and public support necessary to achieve his ambitions—which include repairing the economy, improving relations with Japan and raising South Korea's profile around the world—will be difficult enough without also having a civil war in his party. ■

Banyan Abe's legacy

Not just Japan, but Asia too is better off for Abe Shinzo's vigorous diplomacy

A PROCEDURAL RULE has long limited the trips a Japanese prime minister can ordinarily make overseas to the brief periods of the year when parliament is not in session. The rule appears tailor-made for the kind of inward-looking nonentity who has too often occupied the prime minister's residence in Japan's modern history. Abe Shinzo, who was assassinated on July 8th, could not have been further from the stereotype. He squeezed 81 overseas visits to Asia, America and beyond into his second and longer stint in office, from 2012 to 2020.

Those trips helped transform Japan's foreign-policy focus and standing in Asia—and confirmed Mr Abe as the most consequential Japanese statesman since the second world war. Mr Abe once explained to Banyan that China's ascendance posed an existential challenge to Japan similar to that of Western imperial powers when they turned up in gunboats in Tokyo Bay in the mid-19th century. At home, his response was to bolster both the economy and security. Abroad, it meant putting a normally retiring Japan at the forefront of efforts to prevent Chinese assertiveness from wrecking an open, international order that for decades had by and large guaranteed East Asian peace and prosperity.

Japan, the ally that anchors the American military presence in the region, also needed to do more to keep a distracted America engaged, Mr Abe saw. That included seeding the idea of a “free and open Indo-Pacific” that is now at the conceptual heart of America's grand strategy in Asia. During his brief term as prime minister in 2006-07, he first attempted to promote a “Quad” involving Australia, India, Japan and the United States—less an alliance than an alignment of states with concerns about the

implications of China's rise.

The idea fizzled, but Mr Abe revived it in his second term. India, with a tradition of non-alignment and a reluctance to rile China, was hard to convince. Malcolm Turnbull, Australia's prime minister at the time, says that it was Mr Abe who “put in the hard yards” with Narendra Modi, India's prime minister, and thus brought the country around.

A warm style with foreign leaders—including man-hugs with Mr Modi—helped. Mr Abe was also the first Asian leader to realise that with the election of Donald Trump, America had changed. He hugged Mr Trump close, too, even as the new president disparaged America's traditional alliances and pulled the country out of the Trans-Pacific Partnership (TPP), a prospective trade pact among 12 countries. Against the odds Mr Abe, working with Mr Turnbull, kept the idea alive, forming the TPP's successor, the Comprehensive and Progressive Agreement for Trans-Pacific Partnership. That, says Mr Turnbull, showed, “We don't have to do everything with the Americans.” That the door is still



open for the United States to return—the glaring absence in its grand Asian strategy is an economic dimension—is down to Mr Abe above all.

Across Asia, Mr Abe's newly assertive diplomacy was much less controversial than it was at home. That might surprise some. After all, especially in South-East Asia, countries are reluctant to be openly dragged into the great geopolitical struggle between China and America for regional supremacy—and Japan is America's indispensable Asian ally.

Yet Japan has plenty of appeal in the region. Commercial ties run deep. Japanese state-backed aid and loans provide a welcome alternative in South-East Asia to China's Belt and Road Initiative of lending for infrastructure. Japan offers many of the goodies of investment and technology transfer without the political pressures to sign up to an official narrative that China brings to bear. The Japanese presence, says Kevin Rudd, another former Australian prime minister, “provides foreign-policy leverage in dealings with Beijing”. In March Cambodia's long-standing dictator, Hun Sen, who has fallen under China's sway, ostentatiously feted the current Japanese prime minister, Kishida Fumio. China's shocked silence spoke volumes.

In part because Japan rarely lectures other countries, rulers with hang-ups about America often have no problems with Japan. Like his predecessor, Rodrigo Duterte, anti-American grievances run through the new president of the Philippines, Ferdinand “Bongbong” Marcos. But, like Mr Duterte, Mr Marcos evinces no qualms working with Japan, including on defence co-operation. And Japan is today a much more engaged partner. That is thanks to the transformations that Mr Abe wrought.





Nationalism

Heading down a dangerous path

By fostering an ugly nationalism, Xi Jinping is making China and the world less safe

“**A**BE IS DEAD and that’s it,” a social-media user called Zhang Beihai wrote to her 2.6m followers on Weibo, a Twitter-like platform. “He deserved to perish.” Another Weibo user went further: “His whole family deserves to die.” The assassination of Abe Shinzo, Japan’s former leader, on July 8th elicited a wave of joyous reactions online in China, where he was widely reviled. “News just in,” quipped one. “US President Kennedy meets Japanese Prime Minister Abe Shinzo.”

Japan is a common target of the nationalists who dominate China’s digital high ground. From an early age Chinese are taught to resent the country for its invasion of China in the 1930s and 1940s, and for the atrocities it committed. Mr Abe was disliked for visiting the Yasukuni shrine in Tokyo, where war criminals are honoured, and for expressing support for Taiwan, which China regards as its territory. One commenter on Weibo said she would “applaud” if the whole of Japan were to “sink to the bottom of the sea”.

But Japan is only one of many targets.

The nationalists scorn America, all of its friends, and Chinese people they deem to be pro-Western. Their vitriol rarely suffers the censorship to which liberal sentiment is routinely subjected. Some of China’s biggest online celebrities are nationalists whose social-media accounts attract millions of followers. Mobs quickly form online, using microblogs, short videos and messaging apps to wage furious verbal campaigns against “traitors”, “spies” and “secondary devils” (Chinese who collaborate with foreign enemies).

Fang Fang became an object of nationalist ire in 2020, when she wrote the 60th and final instalment of an internet diary about life in Wuhan in central China when the pandemic began. Her journal had

described not only the hardships of the world’s first city to experience a covid-19 lockdown, but also her own. For daring to criticise the government’s bungled response, she was subjected to a torrent of online abuse from nationalists. “They behave like a pack of thugs,” Fang Fang fumed, “attacking anyone who fails to cooperate with them, launching wave after wave of attacks.” She compared the onslaught to Mao’s Cultural Revolution of the 1960s and 1970s with its murderous Red Guard mobs. “Today I even saw news that people are preparing to send a squad to Wuhan to kill me,” she wrote in April 2020 as the furore swelled.

Such nationalism worries not only liberals such as Fang Fang, a former member of China’s literary aristocracy. It has also raised anxiety in the West and among many of China’s neighbours. Foreign observers see it as a reflection of the Communist Party’s own mindset, and wonder whether it could portend more aggressive behaviour by China abroad.

American officials avoid pointing fingers at China when talking about the growth of nationalism in authoritarian countries—but it is on their minds. In a national-security directive published in March 2021, President Joe Biden said “America’s fate” was becoming increasingly linked to events abroad. “We face a world of rising nationalism, receding democracy, growing rivalry with China, Russia and other authoritarian states,” he said. ▶▶

→ **Also in this section**

50 Protests in Henan

50 How to be a “civilised” city

— **Chaguan is away**

▶ His secretary of state, Antony Blinken, made a similar point two months later. “Nationalism is resurgent, repression is rising...and attacks against the rules-based order are intensifying,” he told a virtual meeting of the UN Security Council. He was clearly thinking of China.

Russia’s invasion of Ukraine appeared to vindicate some of America’s anxieties. Western officials now wonder whether nationalism in China—both the leadership’s and that of the Chinese public—may lead it down a similar path. They worry most about the fate of democratic Taiwan. Taking control of the island has been a project of Chinese nationalism since 1949, when the Communist Party seized power on the mainland, forcing the defeated Nationalist Party, or Kuomintang (KMT), to flee to Taiwan. In 2017 China’s leader, Xi Jinping, said the country’s “complete reunification” was an “inevitable requirement for realising the great rejuvenation of the Chinese nation”, which he has said should be completed by mid-century. Like his predecessors, he has not ruled out using force.

How much will nationalism shape Mr Xi’s decisions about whether to attack Taiwan? Or to use military muscle against other countries with which China has territorial disputes? They are numerous. China claims the Japanese-controlled Senkaku islands (known in China as the Diaoyu) in the East China Sea. It claims parts of the South China Sea also claimed by five other countries. It disagrees with India as to where their 3,400km border lies (see map). In meetings with foreign counterparts, Chinese officials sometimes point to public sentiment on such matters as a force that they must contend with when devising policy. Are they overreging it?

Sending hate across the Strait

China’s nationalists are certainly becoming more easily aroused and quick to demand tough action against perceived enemies, especially Taiwan’s China-sceptic leadership. Following Mr Abe’s death, Sima Nan, one of China’s best-known nationalists, with nearly 3m followers on Weibo, mused online about whether it would be right to assassinate Taiwan’s president, Tsai Ing-wen. “The peaceful liberation of Taiwan is the desire of all Chinese people,” he wrote. “If stabbing Tsai Ing-wen to death could bring about peaceful unification, wouldn’t people be overjoyed?”

Videos have circulated on Weibo in which two nationalists go further, arguing that China should seize the opportunity now, while America is distracted by Ukraine, to launch a military assault. It could finish the job in three days, says one of them, Li Yi, an academic who has 43,000 subscribers on YouTube and thousands of followers on Weibo. Mr Li gives talks in China about his belief that peaceful unifi-



cation with Taiwan—still the party’s official aim—is unattainable. One of his recent lectures on this theme was given at a training academy for officials run by a district-level party committee in Beijing.

But Mr Li’s opinions are controversial, even within the establishment. In 2020 Qiao Liang, a hawkish former general, published an unusual rebuke to those who have been demanding an invasion of Taiwan. No government decision, he said, is made merely on the basis of public views. “Restraining factors must first be considered.” He wrote that doing otherwise “may be patriotic in name, but harm the country in practice”. Hu Xijin, a former editor of the *Global Times*, a chest-thumping tabloid in Beijing, suggested in a recent vlog that public opinion would not goad China into action. “If we think that the time isn’t ripe for resolving the Taiwan problem militarily,” he said, “no force can compel us to start a conflict.”

China’s popular nationalism has partly been shaped by the party itself. After it crushed the Tiananmen Square protests of 1989 it ramped up the teaching of “patriotism”, which, officials insist, involves loving the party as well as the country. Since then, schools have been required to stress the humiliation China suffered at the hands of foreigners before the party seized power, going back to the opium wars launched by Britain in the 19th century. The aim is to inculcate a sense of victimhood, and gratitude to the party for making China strong again. It has helped the party’s case that the country has enjoyed rapid economic growth for most of the past three decades. So, too, has Mr Xi’s more assertive approach to foreign policy and a strong perception among many Chinese, especially since the global financial crisis of 2007-09, that the West is in decline.

For now the party still appears capable

of controlling popular nationalism to suit its purposes. Before Mr Xi took over in 2012, it occasionally permitted large-scale protests against Western countries, in part to give China diplomatic advantage by showing how much Western interests in China stood to suffer. In 1999 officials bused students to Beijing’s embassy district to stage demonstrations outside the American and British missions after NATO’s bombing of the Chinese embassy in Serbia (China does not accept that this was an accident). In the months leading up to Mr Xi’s assumption of power the party tolerated numerous anti-Japanese protests over the contested Senkakus.

Mob rules

But Mr Xi appears more nervous than his predecessors. While fostering the online variety, he has kept real-world nationalism on a much tighter rein. Mr Xi’s hard line on NGOs applies almost as much to those dedicated to nationalist causes as it does to ones that champion civil rights. Nothing has been allowed in China that is comparable to Russia’s thuggish nationalist youth group, Nashi (Ours), which flourished for a few years with the Kremlin’s blessing. For all the death threats that fly around online, there have been no reports of anyone being killed by nationalist protesters, which suggests that officials do not want such violence. Fang Fang and Mr Xi are in their late 60s. Their worldviews may be very different, but both have memories of the Cultural Revolution, which traumatised people across the political spectrum. Mr Xi and his father were denounced by Red Guards. A half-sister of Mr Xi was “persecuted to death”, according to an official account.

In 2017 the party allowed a scattering of demonstrations against South Korea over the deployment of an American anti-missile system called THAAD, which China ▶▶

► said would threaten its security. But in the decade since Mr Xi took over, there have been no big nationalist protests on the streets. More than ever, stability has been the party's watchword. In the build-up to a five-yearly party congress which is expected to take place late this year officials have become even twitchier. Recent efforts in Henan province to deter demonstrations by account-holders in failed banks have shown how nervous they are (see next story). Since Mao's day there have been no known demonstrations relating to Taiwan. That is clearly because the party does not want bellicose crowds to complicate a relationship that could embroil China in a nuclear conflict with America.

During the pandemic, however, the party has propelled popular nationalism to new heights. Its propagandists speak of "the West's chaos and China's order"—a line that at least until recently has resonated with many Chinese who appreciated the party's huge effort to keep the virus out of the country and to deploy legions of people to contain outbreaks at home. As a result of this vigilance, the death toll was kept extremely low and most Chinese were able to go about their lives much as normal.

But recently the mood has changed. Nationalism is no longer proving such an effective social glue. The Omicron variant of the coronavirus has been much harder to curb; lockdowns have become far more frequent. Shanghai and several other big cities have suffered weeks of draconian restrictions. Many people have protested online, accusing officials in locked-down areas of failing to provide enough help with food supplies and of making it life-threateningly difficult to get treatment other than for covid. Universities have been quiet for most of the Xi era. In May, however, frustrated students on several campuses staged small demonstrations against quarantine rules. Some netizens have been daring to say that Fang Fang got it right.

So worried have officials become that in April, during a two-month lockdown in Shanghai, Weibo censored posts containing the first line of the national anthem: "Arise, ye who refuse to be slaves." Recently Weibo users have again been posting that line, this time with pictures of officials dispersing protesters in Henan.

Mr Xi knows how difficult it sometimes can be to keep patriots on message. The Tiananmen Square protests of 1989 were a dramatic example. Students took to the streets chanting "patriotism is no crime." They described their actions as a "patriotic, democratic movement"—hoping that highlighting their love of China would help to temper the party's hostility. Their tactics worked, for a while, as leaders bickered over whether or not to acknowledge the students' patriotism. During the anti-Japanese protests of 2012 some demonstra-

tors held up portraits of Mao. They were fans of Bo Xilai, a regional leader who had been arrested after a power struggle with Mr Xi. Mr Bo had tried to build support by appealing to nostalgia for the Mao era (those parts of it that did not involve gang violence). He was sentenced to life in prison in 2013.

For the party, online nationalism is a useful tool for crushing dissent—liberals are quickly leapt upon by nationalist trolls. But it is a murky world with pitfalls for the party, too. The neo-Maoists have long since suppressed their ardour for Mr Bo (supporting him would be far too risky under Mr Xi). However they remain vocal online, as cheerleaders for nationalist causes but also as critics of China's social ills, such as the big gap between rich and poor, corruption and the "exploitation" of migrant workers from the countryside. In 2018 the police arrested several neo-Maoist student activists who had been campaigning for better conditions for factory workers.

Maoist to the max

The online Maoists snipe at those they regard as being on the side of the "bureaucrat capitalists" who hold sway over business and politics. One of their bêtes noires is Mr Hu, the former editor of the *Global Times* who, with 24.5m followers on Weibo, is probably the most famous of China's online nationalists. To the neo-Maoists, he is not nationalist enough. They have excoriated him for appealing to netizens to be on their guard when responding to Mr Abe's death. Too much cheering over it has been exploited by China's critics to "blacken" the country, he argued in his vlog.

There is a commercial aspect to China's online nationalism that must also make it tricky to assess where the public truly stands. Online influencers, who earn money by using social media to draw attention

to sponsors' products, use nationalism as clickbait. People are drawn by the conspiracy theories that influencers peddle about, say, American military involvement in creating and spreading covid (disinformation that Chinese officials have eagerly encouraged to dampen speculation in the West about whether the virus may have leaked from a lab in Wuhan). Given the heavy censorship of so many subjects online, some netizens may revel in nationalist mudslinging simply because of the freedom they are given to do so. Bashing liberals carries no risks.

But the West still worries. At the party congress later this year, Mr Xi is expected to secure a third term as the party's leader. This will be a break from what many believed had become a norm: that the general secretary would serve for a maximum of two terms. When it became clear four years ago that this was Mr Xi's plan, some members of the elite grumbled about the idea. They had hoped that the party was moving towards a system of predictable, orderly succession. Some analysts now wonder whether, to justify his continued reign, Mr Xi will play up his nationalist credentials, perhaps by suggesting that only he can secure unification with Taiwan. Western diplomats are anxiously looking out for hints of a tougher line.

Despite frequent forays by Chinese military aircraft and vessels around the island, there are few signs of imminent danger. But China's nationalism has turned uglier, and the politics of succession in China has always been fraught with intra-party tension. It is not impossible that opponents of Mr Xi, or those looking ahead to the day when he eventually departs from the political scene, may adopt more strident forms of nationalism. Mr Xi has nurtured a volatile force. He may not always be so able to keep it under control. ■



Unflagging enthusiasm

Protests in Henan

Send in the thugs

SHANGHAI

How not to handle a financial scandal

THOUGH HE LIVES in Beijing, Guo Jiang deposited 1m yuan (\$150,000) in a tiny bank in Henan province, nearly 700km away, earlier this year. It seemed a good idea at the time. The bank promised higher interest rates than its competitors. He found it using a service provided by Baidu, a reputable online-search giant. Since bank deposits are guaranteed, there appeared to be little to worry about. But Mr Guo has spent the past few months trying to recover his money.

The bank that Mr Guo trusted with his savings, Yuzhou New People's Life Village Bank, is among several in Henan caught up in one of the biggest financial scandals in Chinese history. Some 400,000 people have been unable to access 40bn yuan in deposits. A property developer who controlled the banks reportedly misused the funds, then disappeared.

By late May hundreds of depositors had descended on Zhengzhou, the provincial capital, to demand the return of their savings. Mr Guo, making a second trip, arrived on July 8th, ready for a fight. Still, he was stunned by the violence that occurred two days later. Thugs in white shirts charged into the crowds and beat protesters. Videos of bloodied and injured people spread on Chinese social media faster than state censors could delete them.

Protests are not uncommon in China, but its vast domestic-security apparatus tends to keep them small and brief. Officials in Henan, though, have struggled to end the demonstrations in Zhengzhou. Last month they were accused of manipulating the local covid-control app in a way that forced protesters to quarantine—a move that was widely condemned. After the violence on July 10th, many of the protesters were detained. Mr Guo, who cares for his son and father, was shaken. “I believe what happened today is just the beginning,” he says.

The provincial government's ham-fisted response is in part a reflection of its own lack of cash. For weeks it rejected the most obvious solution to the crisis: compensating depositors. (Baidu's finance arm, Duxiaoman, told depositors that it is merely an intermediary and therefore not responsible.) Not until July 12th did officials offer a partial solution: repaying deposits of up to 50,000 yuan. People with larger deposits (many are seeking to recover millions) will be dealt with later.

Regulators have been waging war against the riskiest practices in the financial system for years, with much success. The shadow-banking industry, featuring off-balance-sheet loans to questionable firms, has been forced into retreat. Peer-to-peer lending has almost vanished. But the run on Henan's banks highlights enduring problems which have been brought to the surface by a slowing economy.

Small banks in China hold about 16% of total assets in the commercial-banking system. Yet they are poorly supervised. Research suggests that about 87% of China's more than 1,400 rural commercial banks are privately owned. Many firms have large stakes in them and are able to access deposits for their own use. This seems to

have been the case in Henan. The property tycoon who controlled four of the troubled banks appears, in effect, to have been raising funds for his company illegally.

Online services have connected small banks to depositors across the country. Now trouble among just a fraction of them can cause widespread problems. One fear is that the news in Henan triggers a broader run on already weak institutions. Such a scenario is possible, says Betty Wang of ANZ, an Australian bank—though she notes that finding branches of bigger banks in the countryside can be difficult.

As for Mr Guo, he left Zhengzhou empty-handed. He expects to receive some compensation eventually. But a full redemption of his deposit is unlikely. ■

Title towns

The civilising effect

BEIJING

Cities win the party's favour with clean streets and tidy toilets

ANY NUMBER of things might bring a city down. For Tangshan it was the brutal assault on several women last month. For Guangzhou it was the destruction of ancient banyan trees. When a company in Changchun produced dud vaccines, the city suffered, too. All three were thrown off the government's list of “civilised” cities in recent years.

The Communist Party has been trying to make cities more civilised since the 1980s, when officials began to worry that market reforms and economic growth might cause moral and social decay. For years undercover inspectors have thus graded cities on dozens of measures. For one to be deemed civilised, streets must be spotless and traffic orderly. Residents should exercise, donate blood and sup-

port “acts of justice”.

Perhaps the top requirement is that a city do nothing to embarrass the party. It is therefore not exceedingly hard to make the cut; around 280 cities, districts and towns are currently considered civilised. Still, the label is worth a great deal to local officials. Many think it helps attract investment and tourists. More important, at least for officials, is that those who run cities that win the designation stand a better chance of being promoted.

But while civilised cities may be greener and cleaner, the label can paper over big problems. Take Tangshan. Inspectors concluded that at least 85% of residents “felt safe” and 90% were “satisfied with the government” (both benchmarks for civilised status). Yet following the assault last month hundreds of residents queued outside police stations to report gang-related crimes and police misconduct. Some eventually retracted their complaints, to avoid “damaging the city's image”, as one shop-owner put it.

The party does not like it when officials waste time and resources. But the civilised label is creating bad incentives. In one city red banners were strung across buildings telling citizens to improve their “quality”. Officials in another sent a “commando team” of workers to “promote civilisation by picking up cigarette butts”. Signs above public urinals often urge users to stand closer to avoid a mess: “One small step forward is a big step for civilisation!”

Residents of cities like Tangshan would prefer that their officials focus on bigger problems first. Then they can worry about cigarette butts.



Sweeping problems under the rug?



Sex abuse and the Catholic church

The unending storm

BUENOS AIRES, KAMPALA AND MADRID

Roman Catholic reformers want big changes to a church rocked by sex-abuse scandals. Talk of schism is in the air

IT IS JUST one of thousands of similar stories. Juan Cuatrecasas's son attended a school in Bilbao run by Opus Dei, a Catholic institution. Around age 12, he became afraid of going, locking himself in bathrooms and suffering panic attacks. He told his parents that his religion teacher had brought him to his office, had him take off his shirt, sat him on his lap and showed him pictures of scantily clad women before touching him through his clothes. Later, he was violated with a pen.

Mr Cuatrecasas went first to the school, not the police. The priest claimed he had made the boy undress because it was hot and showed him pictures to explain women's sexual development. The school denied the worst. The boy was interrogated and his account made to look fabricated. A Spanish court eventually convicted the teacher, sentencing him to 11 years in prison, though that was reduced on appeal. Mr Cuatrecasas echoes a common theme: the abuses are harrowing, but what most outrages some victims is the way the church handles them. Too often, it has denied there is a problem, treated victims

dismissively and shuffled the abusers to different jobs where they can re-offend.

Over the past 20 years the Roman Catholic Church has been battered by a seemingly endless succession of child-abuse scandals. In 2002 the *Boston Globe*, a newspaper, revealed molestation of children by priests and a cover-up implicating Cardinal Bernard Law, then the archbishop of Boston. Similar abuse has been uncovered by wide-ranging investigations in America, Australia and Europe. Isolated but repeated scandals in Africa, Asia and Latin America point to a global problem.

The revelations are still coming. In 2018 a German report on sexual abuse by clerics identified a systemic problem and thousands of victims. Extrapolating from identified cases, a French investigation concluded last year that at least 216,000 people had been abused by members of the clergy in the seven decades to 2020. The Portuguese church announced a national investigation in 2021. In March, following reporting by *El País*, another newspaper, the Spanish government launched one of its own. Poland's more piecemeal approach

has turned up hundreds of victims, and forced a bishop to resign in 2021.

The dismal litany has fuelled calls for change. In 2019 the church's German branch set up a "Synodal Path", a citizens' assembly of clergy and lay people, to discuss the scandal. When it concludes next year, it is likely to make some radical recommendations. Members want an end to mandatory celibacy in the priesthood; ordination for women; blessings for gay marriages and more power for lay people.

That has caused a predictable backlash. Conservatives, especially in Africa and America, accuse German liberals of using the sexual-abuse scandal to dismantle church doctrine. In Africa and Asia, meanwhile, church leaders still dismiss the crisis as a Western problem. There are mutterings of schism.

Pope Francis wants to bring his sun-dered flock together. In March 2020 he announced a global "Synod on Synodality"—a discussion open to all 1.4bn Catholics. What filters up from the faithful will inform a meeting of bishops at the Vatican in the autumn of 2023. Whatever it decides, it seems inevitable that large numbers of Catholics will be left unhappy.

Germany's report in 2018 made many recommendations. Three big changes—reducing the power of clerics, abolishing the requirement for celibacy and changing the church's attitude towards gay people—became the pillars of Germany's synodal path, with the role of women in the church later added as a fourth. ▶▶

▶ The report said that celibacy does not increase the risk of abuse in and of itself, although it did concede that seminaries teach too little about its difficulties. Others have arrived at different conclusions. Australia's Royal Commission into institutional child sex abuse concluded in 2017 that mandatory celibacy made abuse more likely. One of the report's authors, Desmond Cahill, said some priests were "terrorised with their own sexual desire".

Critics have long argued that the clergy is attractive to predators. Being a priest offers child-abusers ready access to victims and the sort of moral authority that, in the past at least, made it hard for those victims to have their complaints heard. The requirement for celibacy makes a career as a priest far less appealing to anyone who craves romance or a family—which is to say, most people. But for those who are used to hiding their sexual desires, such as paedophiles, it imposes few additional burdens. They already have to be celibate, or at least pretend to be.

Some, says Mr Cahill, join the priesthood hoping that a spiritual life might cure them of unwanted urges. And the difficulties of denying the basic human urge for sex can end up warping those who had no intention of abusing children when they took up office, he says. Marie Keenan of University College Dublin, who has written a book on Catholic child abuse, describes priests struggling with "denied sexuality, emotional need, learned rationality, and intellectualisation of physical, sexual, and emotional life".

Whatever the reasons, sex abusers appear to be unusually common among the clergy. Researchers think somewhere between 6% and 9% of Catholic priests and religious figures may have been child abusers. Since much sex abuse goes unreported, reliable numbers for the general population are hard to come by. One of the highest credible estimates comes from Britain's National Crime Agency, which said in 2015 that between 1% and 3% of men might display sexual interest in children, though many never act on it.

Catholic clergy have not always been celibate. In the early days of the church, many seem to have been married. The idea of celibacy began to gather from the 11th century. Its "excellence" was reaffirmed at the 16th-century Council of Trent, though it was not codified in canon law until 1917. Church leaders argue that by forgoing marriage, priests emulate Jesus and can devote themselves more fully to their flock.

But there are exceptions to the rules. Since the 1980s married Protestant clergy who convert to Catholicism have been allowed to become priests. Most Eastern Churches, which have different rites and canon law from Latin Catholicism, but which recognise the authority of the pope,

allow already-married men to become priests too. Blind eyes are often turned. Tere Cortés and Andrés Muñoz, who run the Movement for Optional Celibacy in Spain, say they know priests living with "cleaners" who are their romantic partners. The children of such clandestine unions "can't call their father 'papá'". Similar stories of priests with mistresses or wives are common in Africa.

Even where celibacy is more rigorously policed, many would be happy to scrap it. Polls suggest that majorities in Europe, Latin America and the United States would back change. Even in the conservative Spanish church, most priests say they are in favour too. In 2019 bishops from nine Amazonian countries proposed allowing married men to become priests to help ease a shortage that has left some Amazonian Catholics waiting months between masses. The Vatican vetoed the idea.

The role of women is controversial too. Maria 2.0 is a German pressure-group formed after the country's report on sexual abuse. Shocked by what an all-male priesthood had tolerated, it began campaigning to see women ordained. In 2014, 59% of North American Catholics said they supported the idea. In 2019, majorities in Argentina, Brazil and Chile said the same. Women are far less likely to commit sex crimes than men are.

There is little evidence that women have ever been Catholic priests. Deaconesses are mentioned in the New Testament, though conservatives argue that they were probably not ordained. Once again, practice sometimes runs ahead of theory. In March the diocese of Essen, in Germany, said it would let women perform baptisms because of a shortage of priests. The Amazonian bishops also asked the Pope to re-open a Vatican commission on women deacons. The group—which is, inevitably, split between reformers and conservatives—met for the first time last year.



The resistance many church leaders show to such changes illustrates what many abuse victims see as Catholicism's biggest problem: the concentration of power in the hands of clerics. Church hierarchies, they say, helped with the cover-ups. Colm Holmes, chair of We Are Church International, a reform-minded pressure-group, puts it bluntly: "They [the priests] have the power. They have the privilege. They have the money," he says. "Basically they want to hold onto it."

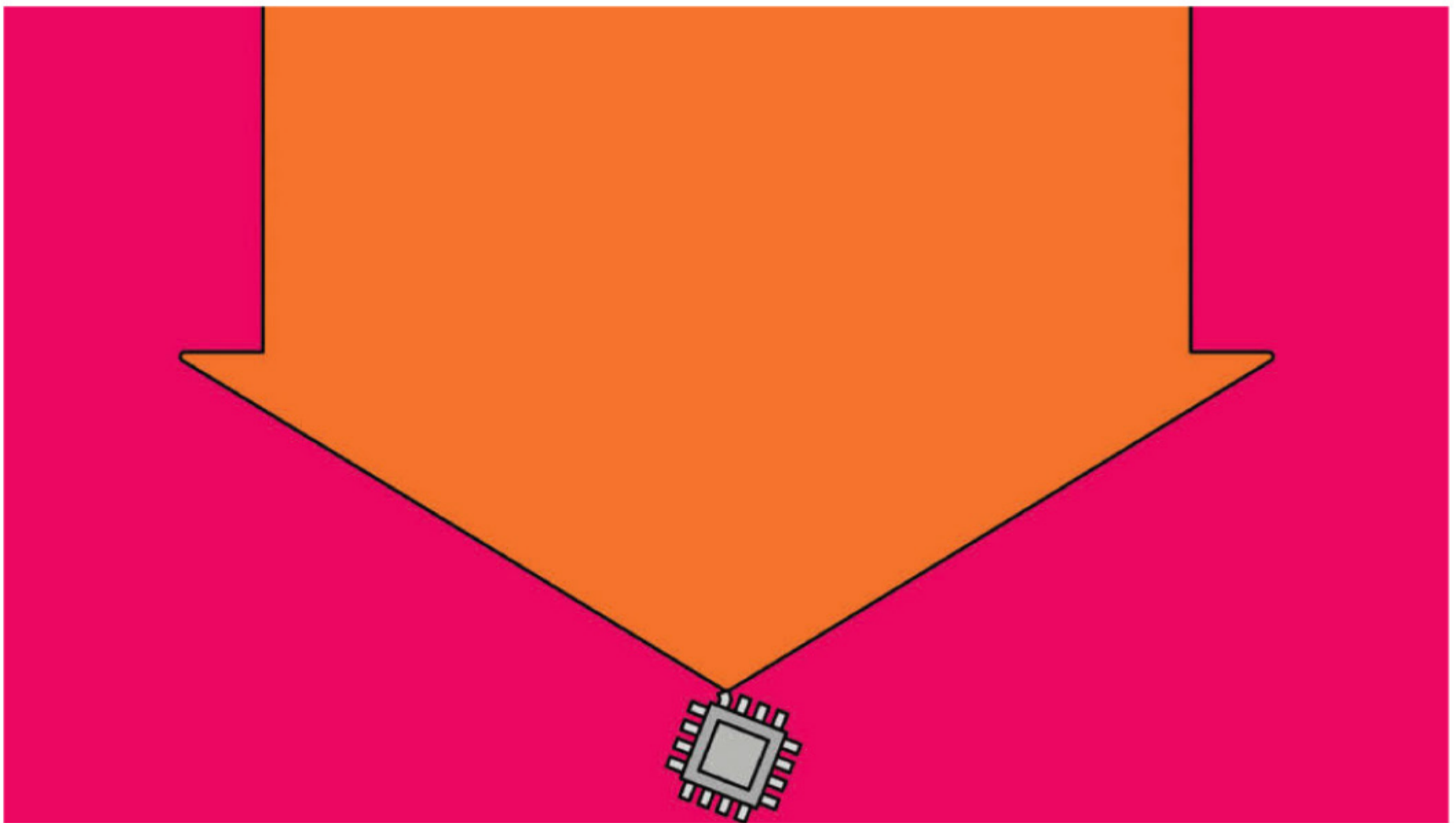
Germany's synodal path has already voted to strip away some of that power. Earlier this year members endorsed a proposal to give lay Catholics a say in choosing their bishops. The very structure of the assembly provides a more democratic model for Catholicism. It points towards a future where lay people could influence decision-making from the bottom up.

Humbling the exalted

Some church leaders are alarmed by that. They think the views of lay reformers go against Jesus's teachings. In April more than 100 bishops—mostly American, but with representatives from every continent—wrote a "fraternal letter" to Germany's bishops warning that the synodal pathway had gone too far. As Thomas Paprocki, the bishop of Springfield, Illinois, puts it: "A shepherd has to guide the people. You don't just let them run wherever they want. The Church is not a democracy."

Perhaps not. But worshippers can vote with their feet. As more sex-abuse stories come to light, the sheep are straying. In America the share of Catholics attending mass each week fell from 31% in 2000 to 17% in 2021. Pews are emptying in Spain and Ireland. In Germany so many are opting out of paying tax to the church that the officials who process such requests have taken on extra staff to cope with demand. In Chile trust in the church has fallen from around 70% to 20%. Only in Africa, with its booming population, is the number of Catholics expected to grow. Even there, their share of the population will fall.

Pope Francis, in other words, has his work cut out. The coming global synod will focus on the process of talking and listening, rather than the practicalities of abuse and reform. But the tensions between conservatives and liberals will be inescapable. Francis himself has proved unwilling to take bold action in the past. After he dismissed the concerns of sex-abuse victims in Chile, a court found that the arch-diocese of Santiago had covered up accusations of abuse. The pope apologised—something that would once have been unthinkable—and seems to have emerged chastened. But that does not make his dilemma any easier. He can move boldly and risk schism, or proceed slowly and risk a longer, slower diminishing. ■



Semiconductors

When the chips are way down

SAN FRANCISCO

Surging supply and softening demand are bringing the pandemic's superstar industry back to Earth

IN 2021 GRAPHICS cards were hot stuff. Video-game devotees and cryptocurrency miners queued overnight to get their hands on the latest high-end offering from Nvidia or AMD, two American chipmakers. And graphics processors were far from the only sizzling semiconductors. An acute shortage of chips disrupted the production of everything from smartphones to cars and missiles, just as demand for all manner of silicon-bearing devices boomed. Last year the chip industry's revenues grew by a quarter, to \$580bn, according to IDC, a research firm. Chipmakers' market values soared. TSMC, a giant Taiwanese contract manufacturer, became the world's tenth-most-valuable company.

With demand expected to grow ever more insatiable, the time-honoured semiconductor cycle—the consequence of the lag between demand and new supply, which takes a year or two to build up—appeared to be a thing of the past. Chip firms opened up their wallets (see chart 1 on next page). TSMC and its two main competitors, America's Intel and Samsung of South Korea, invested \$92bn between them last

year, a rise of 73% relative to 2019—and pledged a further \$210bn or so all told over the next two years.

Now it seems that, far from being banished, the chip cycle may instead have speeded up. Chips of all sorts are looking wobbly. On July 14th TSMC said it would be investing less than it had envisaged. Samsung has warned of stalling profits and is said to be considering dropping prices for memory chips in the second half of 2022. In June Micron Technology, an American memory-chip maker, forecast sales of \$7.2bn in the third quarter, a fifth lower than expected. TrendForce, a firm of analysts, expects memory prices to fall by a

tenth in the next three months. By one estimate, prices of graphics chips have dropped by half since January, as the cryptosphere implodes and gamers spend more time in non-virtual reality. In the euphemistic words of David Zinsner, Intel's chief financial officer, the rest of the year is looking “a lot noisier than it was even a month ago”.

As the turbocharged boom risks turning into a supsize bust, the share prices of the world's chipmakers have slumped by about a third this year (see chart 2), half as much again as the S&P 500 index of big American firms. Added to that, geopolitical tensions risk splitting up a global market and shattering complex supply chains. The pandemic's superstar industry suddenly appears a lot less stellar.

Start with supply. One way that firms have been adding capacity is by installing new kit in existing fabs (as chip factories are known). In the second half of 2021 global spending on equipment to etch chips onto silicon wafers jumped by about 75% compared with pre-covid levels, estimates Malcolm Penn of Future Horizons, another research firm. It takes a year or so for such investments to translate into new output, so late 2022 could see a production glut.

Firms can also build all-new fabs, which takes a bit longer. According to SEMI, one more research group, 34 of these came online worldwide in 2020 and 2021. Another 58 are scheduled to open between 2022 and 2024. That would raise global capacity by roughly 40%. Intel has six fabs in ▶▶

→ **Also in this section**

55 Musk's Twitter storm-out

55 Powering up Eskom

56 German industry's gas shock

58 Bartleby: Office hypertension

59 Schumpeter: Oil's new eastern bloc

WHAT IS AVAXHOME?

AVAXHOME-

the biggest Internet portal,
providing you various content:
brand new books, trending movies,
fresh magazines, hot games,
recent software, latest music releases.

Unlimited satisfaction one low price

Cheap constant access to piping hot media

Protect your downloadings from Big brother

Safer, than torrent-trackers

18 years of seamless operation and our users' satisfaction

All languages

Brand new content

One site



AVXLIVE . ICU

AvaxHome - Your End Place

We have everything for all of your needs. Just open <https://avxlive.icu>

▶ the works, including a \$20bn leading-edge “megafab” in Ohio, and factories in Arizona and Magdeburg, Germany. Samsung’s plans include a large modern fab in Texas. TSMC is building a similar one in Arizona. Most of these are expected to begin producing chips by 2025.

There was always the risk that demand might have faded by then. But the hunger for chips has waned faster than expected. The clearest signs are in the market for personal computers (PCs), which account for about 30% of overall demand for chips of all varieties. After a pandemic boost as working and schooling from home became the norm, global PC shipments will fall by 8% this year, reckons IDC. That is partly because some of those pandemic purchases had simply been pulled forward. Sales of smartphones, another 20% of demand, are expected to ebb, too. In April smartphone shipments in China, the world’s biggest market, were a third lower than in the same month last year. The slowdown in PC and phone sales will be sharper still if the world economy dips into recession.

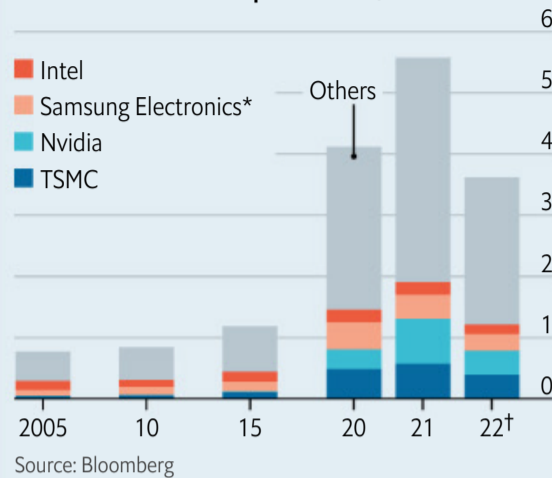
Data centres and carmaking consume around one-tenth of the world’s chips apiece. Demand is not forecast to fall this year. But signs of softness can be seen. Chinese orders for server chips, which power data centres, have dropped off. Many panicked carmakers, for their part, have double- or triple-ordered chips to avoid the sort of shortages that forced them to cut output last year. Stacy Rasgon of Bernstein, a broker, points out that in the past few quarters shipments of automotive chips have been about 40% higher than what you would expect based on the number of cars shipped and the number of chips in a typical car. Big stockpiles in the car industry may mean a sudden drought of new orders.

The downward pressure on prices may be compounded by another powerful force. Political considerations, both do-

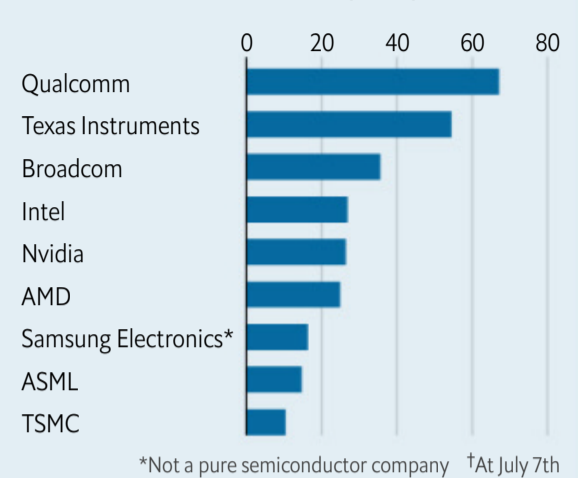
A peta flop

Semiconductor companies

Worldwide market capitalisation, \$trn



Share of revenues from China, 2021, %



mestic and international, increasingly influence chip supply and demand. On the supply side, last year’s crunch spooked governments and reminded those in the West that 75% of all semiconductors come from Asia. Many now want to bring the manufacture, especially of leading-edge chips deemed of strategic importance, within their borders. In America, Congress is wrangling over the CHIPS Act, which, if enacted, would hand the industry up to \$52bn over five years in subsidies and research-and-development (R&D) grants. The EU’s version offers €43bn (\$43bn) until 2030. India, Japan and South Korea have similar schemes. So does China, which launched a semiconductor policy in 2014.

State largesse could lead to more overcapacity. And interventionism may further dent the outlook. A chip industry fragmented along national borders would risk wasteful duplication, driving up costs for consumers. A report by BCG, a consultancy, and the Semiconductor Industry Association, a lobby group, finds that in a scenario where semiconductor production is self-sufficient within regions chip prices would increase by between 35% and 65%.

America’s government seems intent on constricting demand in another way. It is using export controls to deny Chinese buyers access to semiconductors and the tools needed to make them. The urge is understandable: China is an authoritarian challenger to the American-led, rules-based global order. Awkwardly for chipmakers, China is also the world’s biggest chip market. TSMC and Intel have already lost Chinese customers as a result of American restrictions. Others, such as Qualcomm, note in their annual reports that Chinese clients are developing their own chips or switching to local suppliers, in part because of geopolitical tensions. American chipmakers warn that their large R&D budgets would be difficult to sustain if they lost Chinese custom.

Political considerations are a headache

for others in the semiconductor value chain, too. On July 5th Bloomberg reported that ASML, the Dutch monopolist in the market for the \$100m lithography machines used to etch high-end chips, was under pressure from America’s government to stop selling its gear to Chinese firms. China accounts for 15% of ASML’s sales; its share price fell by 7% on the news. The market values of ASML’s American suppliers, such as Azenta and MKS Instruments, also slid. Other American toolmakers, such as Applied Materials, KLA and Lam Research, derive a third of their revenue from Chinese customers. All are in talks with American authorities to limit their sale of high-tech tools to China.

The chip bust may be softened if the drive for silicon self-reliance sputters. Continuous subsidies would be needed to keep American fabs at the cutting edge. That, in turn, would require sustained interest from easily distracted policymakers. This month Intel said it would push back the opening of its fabs in Ohio, blaming delays in passing the CHIPS Act. TSMC has ▶▶

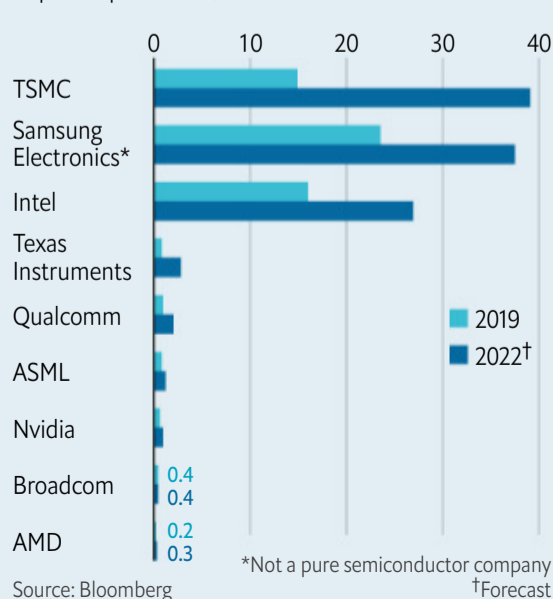
[Sign up to the newsletter](#)

For our analysis of the megatrends in technology and business, plus an essential guide to the corporate week ahead, subscribe to our weekly newsletter, The Bottom Line, at economist.com/the-bottom-line



Castles made of silicon

Selected semiconductor companies
Capital expenditures, \$bn



► said it may need to slow the construction of its Arizona fab for the same reason. In April Morris Chang, former chairman of TSMC, bluntly called America's attempt to reshore chip production an "exercise in futility", pointing to high costs and the lack of engineering expertise.

Indeed, take out the state intervention and dips in chip cycles have been getting shallower of late, notes Ajit Manocha, who heads SEMI. That may be in part because the industry has become more consolidated. In the 1980s 20-odd firms jostled in the market for memory chips. Today it is dominated by three: Micron, Samsung and SK Hynix. At the cutting edge of microprocessor-making, Intel, Samsung and TSMC are the only firms capable of churning out the most advanced kit, down from nearly 30 firms in 2001. Fewer firms control a greater share of capital expenditure and can rein it back in if supply outstrips demand. This will require the chipmakers to rediscover capital discipline—something they have not had to exercise in a while. ■

Twitter v Elon Musk

Blocked and reported

Whatever happens in court, Twitter is overdue for a shake-up

ELON MUSK'S acquisition of Twitter was to be one of the biggest buy-outs in corporate history. Now it threatens to become one of the ugliest disputes. On July 12th Twitter sued Mr Musk in a Delaware court for pulling out of the \$44bn deal, as the world's richest man—and holder of Twitter's sixth-most-followed account—took to the internet to engage in battle by meme.

The argument may play out over months. But whoever prevails in court, Twitter has bigger problems to reckon with. Though it is one of the world's most talked-about social networks, it has struggled to turn that clout into a successful business. Whoever ends up owning the app will press its managers for change.

When the sale was agreed in April, Mr Musk's offer of \$54.20 per share looked cheap—including to Twitter's board, which at first wasn't interested. No sooner had the deal been struck than tech markets crashed. On July 11th Twitter shares were trading at under \$33, having shed another 11% in value as investors lost hope that the deal would happen (the share price has rebounded a bit since). Mr Musk claims to be pulling out because Twitter has more spam accounts than it told him. Many detect a simple case of buyer's remorse.

For that reason Twitter probably has the

upper hand in court. If the judge takes its side, Mr Musk faces a break-up fee of \$1bn, as specified in the contract. He may consider that a victory. The judge could go as far as ordering the sale to go ahead at the agreed price; in 2001 the same Delaware court ordered Tyson Foods (a firm dealing in real rather than digital bird) to complete its purchase of IBP, a beefpacker. That deal, though, was worth less than a tenth as much as the Twitter purchase. And no one is sure what would happen if the mercurial Mr Musk simply defied an order to complete the acquisition. The dispute may yet be settled out of court, with Mr Musk paying a higher break-up fee or buying the company for less than the price he agreed.

However the saga ends, Twitter's bosses will face the same puzzle they have contended with for years: how to turn their influential product into a more profitable one (see chart). Part of the problem is a failure to attract new users—and not of the bot variety against which Mr Musk has railed. While Facebook, founded just two years before Twitter, has soared to 1.9bn daily users, Twitter has reached 230m and is growing only slowly. Upstarts, notably TikTok, have lapped it.

Behind that stagnation in users lies a stagnating product. Whereas Facebook and other social apps have evolved, Twitter today is a similar experience to when it launched in 2006. It had a chance to innovate when it bought Vine, an app which popularised short video four years before any TikTokers showed off their dance moves, but allowed it to wither. It tried to copy Snapchat's and Instagram's disappearing posts with "Fleets", but the idea flopped and was killed off last year.

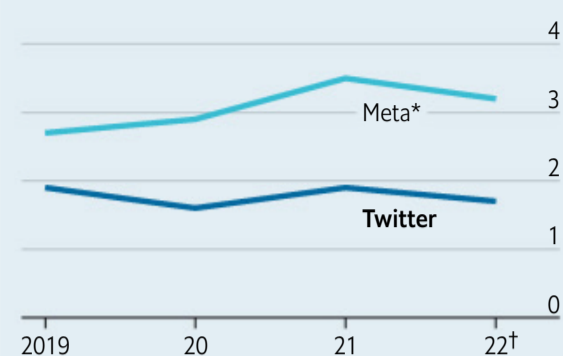
Lately Twitter has been bolder, with some success. "Spaces", a live-audio feature, has proved popular enough to largely kill off Clubhouse, the app that inspired it. It has devised features to retain star creators, like tipping and pay-to-follow accounts. And it has pushed into longer-form content with the purchase last year of Revue, a Substack-esque paid-newsletter platform, and the launch in June of Notes, a way to write tweets of up to 2,500 words.

Monetising these and other innovations may prove harder. Over the years Twitter's revenue growth has been even more disappointing than its growth in users. This year it will account for about 0.9% of worldwide digital-ad spending, estimates eMarketer, a research firm. Facebook and its sister company, Instagram, will grab 21.5%; even TikTok, just five years old, will take a slice worth 1.9%.

A weakening ad market has sent social-media firms scrambling to diversify their revenue; nearly 90% of Twitter's comes from advertising. Twitter Blue, a subscription option launched last year, offers modest benefits including an "undo tweet" but-

Little-value ad

Worldwide monthly revenues
Per daily active user, \$



*Includes Facebook, Instagram, Messenger and WhatsApp

†January-March

Sources: Bloomberg; company reports; *The Economist*

ton for \$2.99 a month. Mr Musk had wanted to push subscriptions, tweeting in April that Twitter Blue should be ad-free. Yet an ad-free Twitter would have to cost much more than \$2.99 if it were to match the current model. Twitter's accounts suggest that American users each bring in over \$6 a month in ad revenue, on average. And unlike other subscription businesses which can eschew mass audiences in favour of small, high-paying ones, Twitter needs lots of users to produce its buzzy content.

Private ownership by a famous risk-taker looked for a while as if it might enable the kind of shake-up that Twitter needs. Instead the Musk affair looks like another distraction from the task at hand. ■

Business in South Africa

Fighting the power

JOHANNESBURG

A man with a plan to fix South Africa's benighted electric utility

ANDRE DE RUYTER is used to having his weekends ruined. The CEO of Eskom, South Africa's state-owned electric utility, was recently interrupted by a call telling him that locomotives carrying coal to a huge power station had stopped running. Thieves had stolen the overhead cables. He had to find working diesel trains—not an easy task, since fuel is often pilfered, too. "When people ask why isn't Eskom turning around," says Mr de Ruyter, "it's because the chief executive is spending his Sundays trying to find locomotives."

Eskom is a cause and a symbol of South Africa's problems. Its woes have deep roots. After white rule ended in 1994 Eskom expanded access to electricity. But supply failed to keep up with rising demand. Two giant plants were belatedly given the go-ahead in 2007 but one is unfinished and the other faulty. Money has been ►►

▶ diverted from maintaining the existing fleet, which is run harder than it should be. Skilled engineers have retired or left for jobs abroad. “Load-shedding”, as rolling blackouts are locally known, has entered common parlance. South Africans have suffered more of them since January than in any preceding full year.

Then there is corruption. Under Jacob Zuma, president from 2009 to 2018, Eskom contracts worth almost 15bn rand (\$1.4bn) were given to cronies, many of them to businesses linked to the Indian-born Gupta brothers, according to a recent judge-led inquiry. Today crime is less systemic, but still present. Coal, diesel and cable theft has increased since Russia’s invasion of Ukraine raised commodity prices. Procurement fraud remains rife. An audit of one power plant discovered 1.3bn rand of unaccounted-for purchases. Another inspection uncovered that welders’ knee-guards worth around 75 rand were being bought for 80,000 rand a pop. “They were not diamond studded,” notes Mr de Ruyter.

Having taken the helm in early 2020 after a stint as boss of a packaging firm, Mr de Ruyter wants to transform Eskom from a Soviet-style monolith to a 21st-century company. The ruling African National Congress (ANC), with a penchant for dirigiste policies and a lackadaisical approach to crime, is standing in his way.

Mr de Ruyter has made some progress, starting with bringing a degree of stability. Before his appointment Eskom had gone through ten CEOs in six years. Thanks to greater discipline and cost-cutting measures, such as not replacing some retiring staff, the net loss in the latest financial year, which ended in March, is expected to have fallen from around 20bn rand in each of the previous three years to less than 10bn rand. He is trying to chip away at the mountain of total debt, which peaked at nearly 640bn rand in 2020 but has since come down to around 400bn (though servicing it still requires occasional government bail-outs).

More strategically, Mr de Ruyter argues that Eskom must be restructured. Rather than generate, transmit and distribute electricity in an anachronistic, “vertically-integrated” way, Mr de Ruyter wants the company broken up and subjected to market forces, becoming a platform for private-sector generation and distribution. That, and a predictable tariff regime, would attract private capital to build renewable-energy infrastructure needed over the next decade to replace South Africa’s ageing coal-power fleet, which generates 84% of the country’s electricity.

Mr de Ruyter points out that South Africa’s miners and manufacturers fear that large import markets may start to charge levies on South African products because they are so carbon-intensive. A failure to



Andre de Ruyter, weekend warrior

decarbonise would also be bad for Eskom, he adds. The company stands to benefit royally from the \$8.5bn in assistance for decarbonisation offered to South Africa last year by rich-country governments. As a bonus, it is harder to steal sun and wind than coal and diesel.

Although Mr Zuma’s successor, Cyril Ramaphosa, sometimes says he supports Mr de Ruyter’s reforms, his government has thwarted them. Fearing a voter backlash, the ANC keeps bills below cost and lets many South Africans get away with not paying them at all—municipalities’ arrears to Eskom add up to around 46bn rand. The energy department, run by Gwede Mantashe, a communist and former union leader who wants to protect coal-mining jobs, has blocked the procurement of renewable power. An illegal strike was concluded earlier this month after the government gave Eskom workers a 7% pay rise.

The import-substitution policies of the industry department, also headed by a communist, mean that Eskom struggles to buy solar panels for pilot projects. Pravin Gordhan, the minister who oversees state-owned firms, and yet another communist, has dawdled over appointing board members, leaving Mr de Ruyter short of the support he needs to enact his plan. Opponents of his reforms from within the ANC have accused him, without evidence, of racism. Does he ever think he should have turned the job down? “Three times every day before lunch,” he jokes. And perhaps four times on a Sunday. ■

Natural gas and European industry

The high cost of low pressure

LUDWIGSHAFEN

Can Deutschland AG cope with the Russian gas shock?

FOUNDED IN 1763 by Frederick the Great, Königliche Porzellan-Manufaktur still uses traditional methods to make its high-end porcelain. As in the past, KPM vases and cups are blasted with heat in furnaces: first at 1,000°C, then at 1,400°C. Hardly the cutting edge of German manufacturing—but emblematic. KPM’s fortunes are, like those of German industry as a whole, tied to the availability of cheap natural gas. Its four ovens consume almost as much of the stuff in a year as 100 single-family homes.

Those fortunes now look imperilled. Industry accounts for 37% of Germany’s gas consumption, a third more than the EU average—not counting the gas-fired electricity it gets from the grid (see chart on next page). Until recently, Germany got over half its gas imports from Russia. As happens every summer, on July 11th the main conduit for the stuff, Nord Stream 1, was shut down for maintenance. It may remain inactive after the planned restart date of July 21st. Russia’s autocrat, Vladimir Putin, is threatening to starve Europe of the fuel as punishment for Western

sanctions imposed after his troops invaded Ukraine. Many EU countries are vulnerable. But Germany has the most to lose.

With just months before a winter spike in demand for heating, Germany is bracing for all eventualities. Smaller firms such as KPM are working overtime to fill warehouses so they have something to sell if their gas is turned off. Giants like BASF, the world’s largest chemicals company, have drawn up complex contingency plans. The government is pushing through laws making it easier to spread the pain of higher gas prices and bail out fragile gas distributors. Regulators are assessing which businesses can lose access to gas without upsetting supply chains. Consumers are snapping up firewood and electric heaters, which are sold out in parts of Germany.

With a dash of luck—a mild winter and no more supply interruptions, such as the recent fire at a liquefied natural gas (LNG) plant in Texas—Germany should avoid rationing this year. Russian gas is already down to 35% of total imports. A longer-term problem is harder to solve: how to ▶▶

▶ adapt the country's industry for a future without cheap Russian supplies, which the EU wants to wean itself away from.

Germany has done just about everything it could to get into this pickle. Fearful of another Chernobyl or Fukushima, it mothballed its nuclear reactors. It simultaneously powered down coal-burning plants to slow global warming. Political neglect cost it an early lead in renewable energy. And all the while the country's political and business leaders promoted natural gas as a form of "bridge" energy, to be phased out in favour of wind, solar and other greener sources.

In typical corporatist fashion, Germany's big parties, industry bigwigs and trade unions collectively decided that cheap Russian gas was great industrial policy, too, notes Rüdiger Bachmann of the University of Notre Dame. This has allowed titans like BASF to churn out basic chemicals, such as acetylene and ammonia, which in turn fuelled the *Mittelstand's* manufacturing powerhouses; industry still makes up 27% of GDP, compared with about 17% in Britain and France.

But it has made the economy a gas-guzzler. BASF's flagship factory in Ludwigshafen, Germany's biggest single consumer of gas, inhaled 37 terawatt-hours-worth last year—half as much again as the whole of Denmark. The company's boss, Martin Brudermüller, warned in April that "Russian gas deliveries have been the basis for the competitiveness of our industry." If they disappeared overnight, this could trigger "the most severe economic crisis since the end of the second world war".

For a sense of how things might unfold, start in Ludwigshafen. Though it resembles an agglomeration of plants, the facility is in fact a highly optimised *Verbund* (combine) held together by nearly 2,850km of pipes. If gas pressure in that network falls below half its normal level, nothing can be done except shut it all down. The effect would quickly ripple through the economy. Most manufacturers use a Ludwigshafen chemical: fertiliser needs ammonia; toothpaste and chewing gum contain methanol; nappies use polymers; cars, Germany's best-known export, are test-tubes on wheels. Elsewhere steelmakers and other metal-bashers, Germany's second-biggest industrial users of gas after chemicals firms, would grind to a halt. Capital would be destroyed: once molten zinc used to galvanise steel solidifies in its vast tanks, it would be too costly to melt again. The same is true of glass melters.

German industry thus has little room to save more gas without suffering serious damage. Industrial firms can afford to trim use by 8% within a year and the chemical sector by 4%, estimates the German Association of Energy and Water Industries, a lobby group. If businesses are forced to cut

Heat trap

Germany, natural gas, 2021

Sales by customer*, terawatt-hours

Industry	Households	Business†	Other	
370	310	129	121	69
				Power generation‡

Share of industrial consumption, %

Chemicals	Food	Paper	Other
29.7	17.9	14.9	9.2
	Metal production and processing		7.5
		Glass and ceramics	20.8

*Estimates; excludes gas usage within the gas industry

†Includes commerce and services

‡For industrial, household and business use

Sources: BDEW; Zukunft Gas

much more, it would markedly slow Germany's economy. The Bundesbank, the country's central bank, foresees a painful contraction of GDP in the event of gas rationing: 2% in the fourth quarter, relative to a non-rationing scenario, and more than 8% in the first quarter of 2023.

Germany's newish government is desperate to avert this scenario. It will do "whatever it takes" to keep the country's energy market from collapsing, in the words of Robert Habeck, Germany's minister for economy and climate. Some of his ideas are popular but counterproductive—the loans and subsidies already being doled out to firms hurting from high energy costs could encourage consumption. Although coal plants also produce district heating, reactivating them while resisting nuclear power, which is climate-friendlier but despised by his Green Party, seems environmentally nonsensical.

Girding for the worst, on July 5th Mr Habeck presented parliament with a package of bills aimed to give it more tools to react. The legislation will probably be first used to save Uniper, Germany's biggest distribu-

tor, which provides gas to hundreds of municipal utilities and whose collapse could trigger a cascade of bankruptcies. Uniper is currently getting only 40% of its contracted Russian gas and must cover the shortfall in the spot market at much higher prices. It is losing €35m (\$35m) a day, according to Bernstein, a research firm.

To encourage companies to dig deeper for gas savings, the government is expected to launch an auction mechanism in late summer. This will allow firms to bid for how much they are willing to curb gas use and at what price. A survey by the Association of German Chambers of Commerce and Industry, another lobby group, found that this could reduce demand by about 3%—not a lot but available quickly and helpful at the margin.

If in winter gas is still in short supply, Mr Habeck will declare the third stage of the three-tier emergency plan. The Federal Network Agency will then decide which firms must reduce gas consumption and by how much. To make an informed decision, the regulatory body has collected data from 2,500 large firms and is feeding them into a computer model. There will be no hard-and-fast rules, but likely criteria include whether curtailment would destroy capital stock and how critical a firm's output is to a supply chain. BASF would probably get at least 50% of its usual supply; as a maker of luxury goods, KPM may have to close its doors for some time.

Forecasters disagree on the odds of rationing. An analysis by a group of German economics-research outfits puts those of a big mismatch between supply and demand by early 2023 at one in five. Gas-storage tanks have filled up faster than expected thanks to a mild spring, more LNG and some reductions in demand. By July 12th they had reached nearly 65% of capacity and could get to 90% by November, the government's goal, even if Nord Stream 1 stays shut. Others are less sanguine. Most ▶▶



BASfing in all its glory

of the Federal Network Agency's latest scenarios predict that gas will completely or nearly run out by early 2023.

In the next few months the government will seek a middle ground between hobbling German business and angering households, which in the EU are exempt from any rationing, with higher bills. Rather than allowing utilities to pass through price increases, it is likely to introduce some nationwide levy to spread the pain.

In the longer term, German industry must shake off what Claudia Kemfert of the German Institute for Economic Research, a

think-tank, calls the gas-fuelled "illusion of competitiveness". That means doubling down on renewables and technologies that do away with gas. As much as Germany's industrial stalwarts hate to talk about rationing, they love to flaunt investments in alternatives. BASF has bought part of the world's biggest offshore wind farm off the Dutch coast to replace the gas that powers its steam crackers, where hydrocarbons are split into smaller molecules. The glass industry vows to build hybrid melters, to be heated by a mix of electricity, gas and, one day, green hydrogen. Steelmakers are keen

on hydrogen, too, including as a feedstock.

Simply swapping out gas will not do. Germany's industrial web will have to unbundle at least a bit, jettison its most energy-intensive parts and focus on green innovation. Instead of making the same basic chemicals with renewable energy, BASF could move from selling, say, fertiliser to offering fertilising services, helping farmers use less chemicals more efficiently. This sort of thing requires clever digitisation and data, currently not a German forte. But it would play to BASF's—and Germany's—strengths in *Verbund*-building. ■

Bartleby Small moments of great tension

Will the PowerPoint load? How noisy are these crisps?

THE MEETING has been going on for almost an hour already, but the end is now in sight. The vast majority of attendees have already got the cursor lined up over the "leave" button; freedom, or at least a five-minute break, is a click away. And then whoever is chairing asks a simple but terrible question: "Does anyone have anything they want to add?"

Cue almost unendurable suspense. If the chairman's voice is the next you hear, it's all over bar the ritual waving at the camera. But if any of your other treasured colleagues speak up, your plan for a nice cup of tea is destroyed. The silence stretches for a period of seconds. Almost safe. "There is just one thing," says Lauren from procurement, oblivious to the tiny dreams she has dashed and the fleeting hatred she has aroused.

For most people, the workplace is not a stage for high drama. Careers are punctuated by only a few defining moments, from the interview for the top job to the M&A deal that upends an industry. Although some companies and departments are marked by bullying and burn-out, more fortunate employees experience suspense through a series of micro-dramas. Some small moments of great tension happen often enough that they are almost tropes.

The pandemic has created many of these moments. A big Zoom call is under way, with lots of people on the line. Everyone is muted, save the speaker and one unfortunate soul, who has managed to unmute themselves. A lot of rustling can be heard. A family conversation is going on, a small slice of domestic life being broadcast inadvertently into the workplace. It's almost too much bear. What if they have a blazing row? What if someone says out loud what everyone is thinking about the speaker? The horror

of mild public embarrassment looms, and it is stomach-churning. "Jesus, this is unbearable," you say to yourself, and realise you are also unmuted.

Email can also evoke emotion. There is panic, after you send a message to the wrong person and frantically scramble to hit "undo" or "delete". There is dread, when an email arrives from the person who is reliably wrong about everything and you know that opening it will mean conflict and wasted time. And there is mortification on behalf of other people, when an all-staff missive from the chief executive goes out about a new initiative and someone hits "reply all" on their message oleagiously congratulating the boss on their utter brilliance.

Presenting is a low-stakes, high-tension act. "I'm going to share my screen," you say, and press the button that promises just that. The presenting icon circles and circles, and you wonder if it will ever stop. Then you pick the wrong tab to share and everyone can see your calendar, including the entries marked "Job interview". Then you share your whole screen

and suddenly infinite, ever-smaller versions of yourself appear. It is a similar story in the real world. The clicker doesn't work, so you hopefully press it a few times and the deck suddenly jumps forward to the slide that gives away your unexpected strategy recommendation.

The offline world offers other moments of diminutive drama. Entering and exiting meetings while they are still going on is stressless in a virtual environment; in the real world, you have to negotiate your way past colleagues and whisper apologies.

The working lunch is not a problem online: camera off, microphone off, nosh away. In person you must choose items that can be eaten quickly, efficiently and silently. Eating crisps during an in-person presentation sounds like setting off a firework display in a monastery. Taking a bite of some sandwiches risks a carnivorous version of the magician's handkerchief trick, as you find yourself slowly pulling an entire side of beef into your mouth in one go.

If you do not recognise any of these miniature dramas, one possible explanation is that you are already the boss: life is generally a lot less tense if you have ludicrous amounts of self-belief and get to set the rules. But for many employees, as well as almost everyone in Britain, this is what suspense looks like, not remotely dangerous but teeming with the possibility of awkwardness.

If you and someone else have started making a point at the same time, do you keep going and hope that he gives way? What conversation can you start and finish in the time it takes for the lift to go five floors? And so on. The workplace can be a place of planet-changing ideas and epic rivalries. Day by day, it is a theatre of mild agitation.



Schumpeter | Oil's new eastern bloc

Watch Rosneft to see the direction of global petropolitics



IGOR SECHIN is easy to caricature. The boss of Rosneft, Russia's state-owned oil giant, is a burly man with close-cropped hair whose pastime is making sausages, reputedly out of deer he himself has killed. He is one of President Vladimir Putin's most trusted henchmen. Since 2014, when Russia annexed Crimea, he has been blacklisted by America and this year, after Russia's invasion of Ukraine, the European Union put him on its sanctions list, too.

But he is no run-of-the-mill oligarch. The EU calls him "one of the most powerful members of the Russian political elite". As a Rosneft man through and through, he has stood up strongly for the country's oil-and-gas industry, which accounts for about 45% of the national budget. And he has a nose for geopolitics, which helps Rosneft shape and fund Mr Putin's despotic adventurism.

That is why it is worth watching state-controlled Rosneft and its boss to assess their response to the withdrawal of Western oil companies from Russia. On the one hand, the company faces reduced access to Western markets and has lost investment and expertise to help it develop oil- and gasfields in inhospitable parts of the country. On the other, it has benefited from a strategy masterminded long ago by Mr Sechin to pivot towards buoyant markets in China and India. The outcome will help determine whether the world is likely to split into two rival oil blocs.

The West's response to Russia's assault on Ukraine has hit Rosneft hard. Though high oil prices enabled it to pay a record annual dividend recently, an oil embargo has throttled its access to European buyers. Since February it has borne the lion's share of Russia's drop in oil output. Firms that once cosied up to it now treat it as a pariah. BP, a supermajor, has written off its near-20% stake. ExxonMobil, another giant, is trying to pull out of the Sakhalin-1 oil-and-gas joint venture in Russia's far east. Rosneft's relationship with Western oil traders, who used to talk of a "pissing match" to win access to its treasure trove of crude shipments, has floundered. On July 13th a big trading firm, Trafigura, said it had unwound its 10% stake in Vostok Oil, a Rosneft megaproject in the tundra that Mr Sechin believes could sustain Russia for decades.

Pariah status affects Rosneft in subtler ways, too. Many of Russia's oilfields are ageing and require sophisticated techniques to squeeze out hard-to-recover crude at a reasonable cost. In the past

the firm has had strong relationships with Western oilfield experts like Schlumberger, but these have pulled out of Russia. Moreover, sanctions have sent Rosneft's non-Russian board members and senior executives scurrying for safety, leaving a dearth of expertise in their absence.

Yet if anyone has seen this coming, it is Mr Sechin. Balancing Russia's dependence on Western oil markets with business in the east, especially China, has been part of his strategy since Mr Putin first handed him control of Rosneft in 2004. From the outset, says James Henderson of the Oxford Institute for Energy Studies, a think-tank, Mr Sechin saw China's commercial and strategic importance. He struck big oil-supply agreements with China National Petroleum Corporation (CNPC), Rosneft's state-owned Chinese counterpart, in exchange for vast prepayments and financing from China that helped turn the Russian firm into one of the world's largest listed oil companies. The payments helped Rosneft finance the takeover of the main oil-producing assets of Yukos, a Russian oil firm whose boss fell foul of Mr Putin in 2003, as well as TNK-BP, another rival Rosneft bought for \$55bn in 2013. In February, during Mr Putin's pre-war meeting with Xi Jinping, China's president, Rosneft signed another oil deal to supply crude to CNPC worth a whopping \$80bn over ten years.

Mr Sechin's India strategy has been quieter but also, as it turns out, shrewd. Rosneft used its part ownership of Nayara Energy, an Indian refiner, to gain a toehold in one of the world's fastest growing consumer markets. Indian refiners processed heavy crudes that Rosneft once brokered from sanctions-hit Venezuela, a staunch Russian ally in America's backyard. Now the refiners are reportedly keen to take discounted oil directly from Rosneft.

After the initial blow from sanctions, such relationships have enabled Russia swiftly to shift its oil exports east, eclipsing Saudi Arabia in May as the biggest supplier to China and raising oil sales to India from almost nothing to about 1m barrels a day—albeit at steeply discounted prices. Its resilience has caught many forecasters, including the International Energy Agency, by surprise.

Where there's a well there's a way

In order to keep its performance up, Rosneft has to keep pumping and drilling. Yet its need for Western firms like Schlumberger to help it do that may be overstated. Matthew Hale of Rystad Energy, a consultancy, says the vast majority of Russian oil development is in onshore fields that, despite the cold, are easy to exploit. Last year Russian oilfield companies provided four-fifths of the services needed to support these investments. He says the ability of Russian firms to replace Western partners in complex projects is more open to question. That may delay their launch. But for the time being, Rosneft can continue to produce oil fairly freely.

It is not in the clear, though. If oil prices sink, its ability to drill wells profitably will be reduced. Constraints on Western capital, know-how and equipment may confound its attempts to develop big offshore liquefied-natural-gas projects in Russia's frozen far east, which it had once set its heart upon. Without access to Western financing, it becomes even more dependent on China, which always strikes a hard bargain. And next year a full EU embargo on Russian oil will come into effect.

That said, the emerging eastern bloc should worry the West. Not only is an energy axis involving Russia, China and India a challenge for Western oil firms, it is also a threat to the climate—as Mr Sechin's plans to develop Vostok suggest. He probably doesn't give a sausage for such considerations, though. ■

Big and small

Global scale and boutique specialization. How unusual.

With our collection of specialist investment managers, combined with global scale, you get the best of both worlds in one place. From traditional to alternative strategies, and a lot in between, we have something for every investment goal.

Hello progressSM

WESTERN ASSET

ClearBridge
Investments

Brandywine GLOBAL

CLARION
PARTNERS

LexingtonPartners

K2 ADVISORS[®]

BENEFIT STREET
PARTNERS

MARTIN CURRIE

ROYCE
Investment Partners

FRANKLIN
TEMPLETON

Equity | Fixed Income | Solutions | Alternatives

visit [helloprogress.com](https://www.helloprogress.com)



Interest rates and budgets

When maturity misleads

Governments will pay higher interest rates much sooner than you think

IN RECENT YEARS government debt appeared to matter less and less even as countries borrowed more and more. Falling interest rates made debts cheap to service, even as they grew to levels that would have seemed dangerous a generation before. The pandemic put both trends into overdrive: the rich world borrowed 10.5% of its GDP in 2020 and another 7.3% in 2021, even as long-term bond yields plunged. Now central banks are raising interest rates to fight inflation and public debt is becoming more burdensome. Our calculations show that government budgets will feel a squeeze far more quickly than is commonly understood.

In May America's budget officials raised by a third the forecast cumulative interest bill between 2023 and 2027, to 2.1% of GDP. That is lower than forecast before the pandemic, but it is already an underestimate. Officials optimistically assumed the federal funds rate would peak at 2.6% in 2024, but markets now expect the rate to exceed 3% in July 2023. In the euro zone, as inter-

est rates have risen, the premium indebted countries like Italy must pay to borrow has gone up, reflecting the danger that their debts may eventually become too onerous to service. Britain's officials forecast in March that its government would spend 3.3% of its GDP servicing its national debt in 2022-23, the highest share since 1988-89.

For a given cost of borrowing, three main factors determine the cost of servicing legacy debts. Two are straightforward: the level of debt, and the proportion of it whose value is pegged to inflation or prevailing interest rates. Britain's debt-service

costs have risen so sharply, for example, because an astonishing one-quarter of its debt is inflation-linked.

The third factor is more complex: the maturity of the debt. When governments issue long-dated bonds, they lock in the prevailing interest rate. In 2020 America's Treasury issued about \$200bn-worth of 30-year debt at yields of less than 1.5%, for example. The more long-dated debt, the longer it takes for budgets to take a hit when rates rise. The most common measure of this protection, the weighted average maturity (WAM) of debt, can be a source of comfort. Britain, in particular, has a lot of long-dated bonds: the WAM of its bonds and treasury bills is about 15 years.

But measures of maturity can mislead. The WAM can be skewed upwards by a small number of very long-dated bonds. Issuing 40-year debt instead of 20-year debt raises the WAM but does not change the speed with which rising interest rates affect budgets over the next few years. The Office for Budget Responsibility (OBR), Britain's fiscal watchdog, has suggested an alternative measure. Suppose you line up every pound (or dollar) a government has borrowed by the date on which the debt matures. Halfway along you would find the median maturity—the date by which half the government's borrowing would need to be refinanced at higher rates. Call it the interest-rate half-life. Though Britain's WAM is 15 years, its interest-rate half-life is ▶▶

→ Also in this section

63 Red-hot prices in America

63 The ECB's new job spec

64 Buttonwood: Foggy forecasts

65 Abenomics after Abe

66 Free exchange: Central-bank rules

▶ lower, at about ten years.

There is another complication. Central banks in the rich world have implemented huge quantitative-easing programmes (QE), under which they have bought trillions of dollars worth of government bonds. To do so they have minted fresh electronic money, known as central-bank reserves. These reserves carry a floating rate of interest, the adjustment of which is the main tool of monetary policy. When rates rise, the cost to central banks of paying interest on the ocean of reserves created under QE rises immediately. Raising interest rates thus reduces central-bank profits. And because those profits typically flow straight into government coffers, taxpayers suffer.

The effect of QE is therefore the same as if governments had replaced vast amounts of debt for which the interest rate was locked in with debt carrying a floating rate. For most of the history of QE this refinancing operation has been highly profitable, because bond markets repeatedly forecast interest rates would rise sooner than they did. From 2010 to 2021 the Fed remitted over \$1trn to America's Treasury. QE has been particularly lucrative for central banks in euro-zone countries whose long-term debt is risky and therefore carries a high yield. National central banks such as the Bank of Italy carry out most of the ECB's QE locally, bearing the default risk and earning the yield on the bonds of their respective home states, while also paying their share of the ECB's interest costs. Earning the yield on Italian government debt while paying out much less in interest on reserves helped the Bank of Italy to remit profits worth 0.4% of GDP to the government in 2020.

As short-term rates rise, profits from QE will gradually dry up, and could even turn negative. In May the Federal Reserve Bank of New York, which manages the Fed's QE portfolio, projected that interest rates one percentage point above what was expected by market participants in March would be enough to turn the portfolio's net income negative for a short time—a scenario that today looks likely. Another percentage point on interest rates would lead to negative net income for two to three years.

A full accounting of interest-rate sensitivity must thus adjust for the holdings of central banks, treating the associated debt as carrying a floating rate of interest. Refreshing the OBR's calculations, we find that QE reduces Britain's interest-rate half-life to just two years, meaning 50% of Britain's government liabilities will roll on to new interest rates by late-2024. We have also replicated the exercise for bonds and bills issued by governments in America, France, Italy and Japan (see chart). For France and Italy the interest-rate half-life is an estimate. The central banks involved disclose which bonds they hold, and the

WAM of their holdings, but do not reveal how much they have bought of each bond issuance. Our calculations assume they hold a flat proportion of each bond's outstanding value (which in both cases produces a portfolio whose WAM roughly matches the disclosure).

In every case, the interest-rate half-life is much lower than the reassuring WAM. Most striking are the results for Japan and Italy, which have the highest debts. Because the Bank of Japan has replaced nearly half the Japanese bond market with its reserves, the interest-rate half-life is vanishingly short. Thankfully inflation in Japan is only 2.5% and expected to fall. There is little pressure to raise interest rates.

The same cannot be said for the euro zone, where the ECB is projected to raise rates rapidly so as to tame inflation. It is often noted that Italy's huge debts of over 150% of GDP at least carry a WAM of over seven years. But Italy will in fact inherit higher funding costs quickly because its interest-rate half-life is little more than two years. Were the ECB's policy rates to reach 3%, the Bank of Italy's share of the interest costs would immediately rise by an annual 1.2% of GDP. Every one percentage point increase in the financing costs on the €462bn of debt (net of central banks' estimated holdings) coming due by July 2024 would cost the government another 0.3% of GDP annually.

Is there any way for indebted countries

to avoid higher interest costs? It might seem tempting to unwind QE faster, by selling bonds (rather than waiting for them to mature, as several central banks are currently doing). But selling bonds would cause central banks to book capital losses, because rising yields have eroded the value of their bondholdings. At the end of March the Fed's unaudited financial statements showed an unrealised capital mark-down of \$458bn on its QE portfolio since the start of the year; Paul Kupiec and Alex Pollock of the American Enterprise Institute, a think-tank, estimate that the hole has since grown to about \$540bn.

Another option is to find a way for central banks to pay less interest on reserves. A recent report by Frank Van Lerven and Dominic Caddick of the New Economics Foundation, a British think-tank, calls for them to pay interest on only a sliver of reserves that affects their decision-making, rather than the whole lot. The ECB and the Bank of Japan already have such a "tiered" system. It was designed to protect commercial banks from the negative interest rates they have imposed in recent years.

Using tiering to avoid paying banks interest while their funding costs went up would be a tax in disguise. Banks, considered together, have no choice but to hold the reserves QE has force-fed into the system. Compelling them to do it for nothing would be a form of financial repression which may impair banks' ability to lend. It would "transfer the costs [of rising rates] to the banking sector," Sir Paul Tucker, a former deputy governor of the Bank of England, told parliament in 2021.

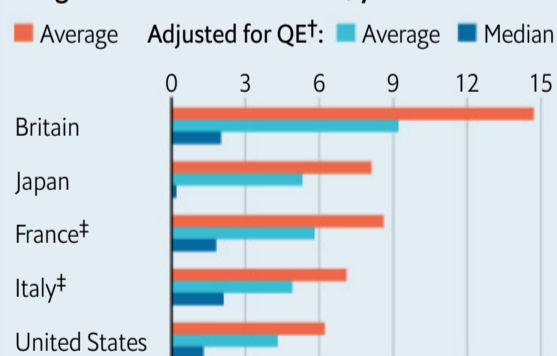
A third option is to tolerate high inflation rather than raise rates. Despite rising interest costs, many countries' debt-to-GDP ratios will fall this year as inflation eats into the real value of their debts. Many prominent economists have argued that an inflation target of 3% or 4% would be better than one of 2%. For now the idea is pie-in-the-sky. Central banks are too worried about their credibility to switch targets, and with good reason: break your promises on inflation once and people may wonder if you will do it again. But because making the switch would deliver a one-time fiscal windfall at the expense of long-term bondholders, and because inflation can be painful to get down, it could eventually appeal to indebted governments.

Whether it is banks, taxpayers or bondholders, somebody has to pay the bills that are now falling due. Soaring interest costs will further squeeze government budgets already under pressure from higher energy costs, rising defence spending, ageing populations, slowing growth and the need to decarbonise. With inflation high, it is also a bad time to let deficits grow—a path that might force central banks to raise rates even more. ■

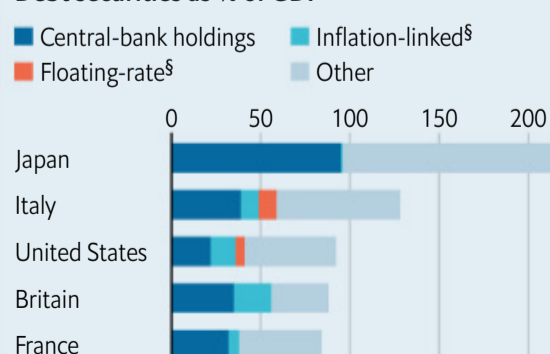
Borrowed time

Government bonds and bills*
July 2022 or latest available

Length of interest-rate lock-in, years



Debt securities as % of GDP



*Central government only †Quantitative easing ‡Median estimated §Net of disclosed or estimated central-bank holdings
Sources: Bloomberg; Office for Budget Responsibility; central banks; finance ministries; *The Economist*



American inflation

On the up and up

WASHINGTON, DC

Inflation in America tops forecasts yet again, adding to recession risks

AT THIS POINT upside surprises in inflation occur with such frequency that surprise is probably the wrong word for them. So it was with America's consumer price index (CPI) for June, published on July 13th. It soared 9.1% compared with a year earlier, marking yet another four-decade high and beating forecasts for an 8.8% increase. Still, investors seemed to be caught unawares, with stocks falling sharply after the data, adding to this year's big losses. The pessimism in financial markets is easily understood: persistently high inflation is forcing the Federal Reserve to press on with aggressive monetary tightening, even at the potential cost of a recession.

All the more important, therefore, to understand how persistent inflation will be. In this respect the most concerning part of the latest data was not the shocking headline figure, about half of which could be attributed to oil and gas prices, which surged early in June but have since ebbed. Rather, it was the change in core prices, stripping out volatile food and energy.

Core inflation rose 0.7% in June from May, the highest month-on-month increase in a year. And it was not a blip: over the past three months core inflation has been running at an annualised rate of nearly 8%, an indication of the breadth of price pressures (see chart). Just about everything—from cars to clothing and furniture to rents—is getting more expensive.

That reinforces investors' belief that the Fed will stay on its hawkish path. A day before the inflation data, bond-market

pricing implied that the Fed would raise interest rates by three-quarters of a percentage point at its next rate-setting meeting in late July, the second straight increase of that size. Following the data, bond pricing put the chances at roughly 50-50 that it would instead opt for a full percentage point increase. Either way, it puts the Fed on track for the steepest monetary tightening in a calendar year since 1981, when Paul Volcker was at the central bank's helm. That is already weighing on economic growth (see United States section).

America is hardly alone in struggling with high prices. Inflation in the euro area is expected to have risen to 8.6% in June. But the details are different. Europe's problems are more closely linked to surging gas costs, both exacerbating the risk of an imminent recession and perhaps limiting the European Central Bank's scope for rate increases. That has hurt the euro, which has fallen by more than 10% since the start of the year, bringing it to parity with the dollar for the first time in two decades.

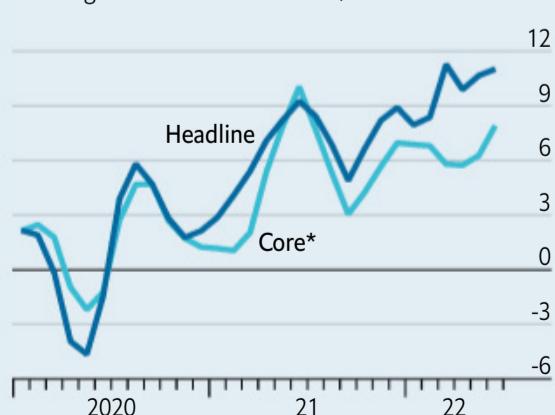
The White House has tried to put as positive a gloss as possible on the figures. Before the data release, it drew attention to the recent decline in petrol prices. The national average is now about \$4.63 per gallon, 5% lower than in June. With the price of crude down by even more, that does probably set the stage for a lower inflation reading in July. Moreover, President Joe Biden's advisers have noted that an alternative gauge of inflation, the personal-consumption-expenditure (PCE) price index, which is usually seen as more reliable by the Fed, has been more muted.

Neither argument is all that reassuring. Energy prices have weakened over the past month, but with the war in Ukraine dragging on and winter looming, they may resume their upward climb before long. As for PCE inflation, it is indeed less extreme than CPI inflation, but it is still more than twice as high as the Fed's 2% target, and rising prices for services such as health care may nudge it higher still.

The best news about inflation is that the

Dear, dear

United States, consumer prices
% change on three months earlier, annualised



Source: Bureau of Labour Statistics *Excl. energy and food

Fed's tightening is in fact gaining traction in the crucial realm of expectations. The Fed cannot solve supply-chain snarls or reduce oil prices. Where it can be uniquely effective is in tempering the outlook for prices. A basic measure of market expectations for annual inflation over the next five years is now 2.5%, down by more than a percentage point since March. In the middle of June a closely watched consumer survey by the University of Michigan put expected annual inflation at 3.3% for the next five years; by the end of the month it was down to 3.1%.

That is precisely what the Fed wants to see. Unfortunately, economists, firms and investors are also busily ratcheting down their expectations for economic growth—a consequence the Fed cannot avoid. ■

Central banks and markets

The visible hand

BERLIN

The ECB has a masterplan to manipulate markets

FINANCIAL MARKETS are supposed to follow a strict division of labour. The central bank sets the risk-free rate to stimulate or cool the overall economy, but it is "market-neutral": it does not favour any asset over another. Private investors choose who to lend to and at what risk premium. Combine the two judgments, and the economy should have a set of interest rates that reflects economic conditions.

The European Central Bank (ECB), however, thinks markets are not doing their job—or at least not the way it wants. It is preparing to intervene in two novel ways: by limiting what it deems an acceptable difference (or spread) in rates between sovereign borrowers; and by greening its bond purchases and banking rules. In doing so it will abandon market neutrality and discriminate between assets.

Start with sovereign spreads. On July 21st the ECB is expected to unveil a new tool meant to prevent borrowing costs among euro-zone governments from diverging too much. The aim is to ensure that monetary-policy decisions work similarly across the bloc. If rising rates, say, led to ballooning spreads, with the extra costs transmitted to private borrowers, some regions might feel a bigger squeeze than others.

The currency union has a history of such divergence. During the euro crisis, between 2011 and 2015, a bigger spread between sovereigns also meant tighter financial conditions for private firms and households. Yet some argue that the ECB's mooted tool is not needed today. Europe ▶▶

▶ has cleaned up its banks; the ECB has pledged to do whatever it takes to save the euro. In the private sector fragmentation is less of an issue: lending rates to firms in Italy are at the level they were before the euro crisis, relative to Germany's, despite widening sovereign spreads.

Moreover, the policy looks tricky to implement. The ECB will need to define what counts as an "excessive" spread. That is hard, because economists do not know what the true, justified interest rate is for any given bond. The tool could encourage vulnerable countries to borrow at will,

knowing the ECB is capping their spreads. So strings may have to be attached. And if it is deemed akin to monetary financing, which is barred under the Maastricht treaty, it may stumble in the courts.

Still, the ECB is likely to forge ahead. There is an emerging consensus that, in a diverse monetary union, managing sovereign spreads is part of monetary policy.

Increasingly the ECB also sees as its duty to curb the financial risks of climate change—its second break away from market neutrality. On July 4th the bank said it would "tilt" its corporate-bond buying to-

wards issuers "with better climate performance". The central bank is also making it harder to pledge carbon-intensive assets as collateral for loans from the central bank.

The ECB's neutrality was always a myth, says Pierre Monnin, an economist at the Council on Economic Policies, a think-tank in Zurich. Market-based estimates of risk are inevitably flawed when it comes to climate change, because no comprehensive system of carbon pricing exists. By failing to correct for unpriced "externalities"—harms imposed by borrowers on third parties—the ECB's nominally neutral ▶▶

Buttonwood The new abnormal

Why markets really are less certain than they used to be

MARKET COMMENTATORS and investors often exaggerate the uniqueness of their times. History counts no fewer than four "Black Mondays"—echoing the "Black Thursday" that sparked the 1929 Wall Street crash, which heralded the Great Depression—even though the 1987 and 2015 editions rapidly proved unremarkable. Many other days once doused in dark paint have been forgotten. The 25-year period to 2007 looks so boring, in hindsight, that it is dubbed the "Great Moderation". The ensuing financial crisis did rock markets, but the pattern of hyped but transitory shocks soon resumed—remember the taper tantrum of 2013?

This year there have been plenty of stomach-churning gyrations. Since January the NASDAQ, a tech-heavy stock index, is down by almost 30%. The shocks keep on coming. Just as investors started to worry about stubborn inflation, Russia invaded Ukraine, turbocharging commodity prices and piling more pressure on central banks to crank up interest rates. China is strangling its economy with its zero-covid policy.

But just how unusual is the turmoil? In order to quantify its uniqueness, Buttonwood has examined three measures of market-related uncertainty: expected asset-price volatility, divergence in economic forecasts and the unpredictability of economic policy as chronicled in the media. The tests suggest we really are living in unusual times.

Start with swings in asset prices. In the past month America's S&P 500 stock index has been three times more volatile than it was before the pandemic. And investors are still jittery. The volatility index (VIX)—which captures investors' appetite for insuring themselves against future stock-price moves—has hovered

at around 25 points since 2020, nearly eight points above its 2010s average. That is not unprecedented, however. Since the 1990s a range of crises, from the Gulf war to the dotcom crash, have kept the VIX near 25 points for months.

The bond-market hysteria is more unusual. The Merrill Lynch Options Volatility Estimate (MOVE) is a gauge of fear among bond investors. It is at levels last seen in March 2020, when the spread of covid-19 caused market panic, although it is still lower than during the 2007-09 financial crisis. The elevated MOVE reflects the clumsy pivot in central-bank policy. On May 4th Jerome Powell, the chairman of the Federal Reserve, signalled it was not even considering raising rates by 0.75 percentage points at its next meeting—before doing just that six weeks later.

Central bankers have become hard to read for a reason: the macroeconomic oracles on which they partly rely, our second gauge, are exceptionally dispersed. A measure of disagreement among professional forecasters of economic growth surveyed by the Philadelphia Fed is nearly

triple its typical 2010s level; it has been above two percentage points for nine consecutive quarters, which last occurred between 1979 and 1981, when inflation was in double digits.

Our third measure of uncertainty, that arising from the inscrutable outlook for economic policy, indicates lasting change the most clearly. An index built by Scott Baker of the Kellogg School of Management and colleagues tracks the frequency of articles that include worrying bundles of words—such as "regulatory", "economic" and "uncertainty"—in global publications. It suggests that economic-policy unpredictability has been rising steadily since the financial crisis and is now far higher than in the late 1990s, when the index began.

That our indicators are flashing red at the same time suggests an enduring step-up in uncertainty from which it may be hard to climb down. Furthermore, the different types of uncertainty reinforce each other. Political polarisation, which tends to make economic policy erratic, is fuelled by high inflation. All this means the economy is harder to forecast, making life harder for central banks, in turn spooking investors. The fragmentation of global trade doesn't help. The unwinding of supply chains encourages stockpiling during booms and fire-sales during busts, amplifying economic swings.

Persistent uncertainty means a higher cost of capital and less affordable insurance against shocks. All of which tends to dampen business investment, weighing on GDP growth and equity returns. There have been many dark days for the NASDAQ in 2022: the index has already recorded 32 daily falls of more than 2% since January. This time their entry on the calendar of doom looks deserved.



stance in fact reinforced such inefficiencies. Fossil-fuel firms also rely more on bond financing than renewables. But although these arguments are economically sound, it is not the traditional role of central banks to price externalities when the government has failed to act.

And are the ECB's own risk assessments up to the task? One yardstick is the adequacy of its first climate-stress test, whose results were published on July 8th. These suggest that 41 of Europe's biggest banks could together suffer about €70bn in credit and market losses over the next three years in the event of more frequent natural disasters and a disorderly energy transition. That is only around 4% of these banks' aggregate capital, and far less than the €400bn of damage the ECB reckons might hit them in an economic downturn.

Yet the ECB itself admits the stress test is only a "learning exercise", rather than an attempt to find out if the banks have a big-enough buffer to withstand climate chaos. Most banks do not have enough data to properly estimate climate losses; many lack the tools for incorporating climate risks into lending decisions. The ECB's first stab at totting up the potential costs of a messy transition is most probably a gross underestimate. By dropping market neutrality, the central bank is taking a more political role. Whether its visible hand ends up bending markets in the right direction is another question. ■

Growth in Japan

Abenomics After Abe

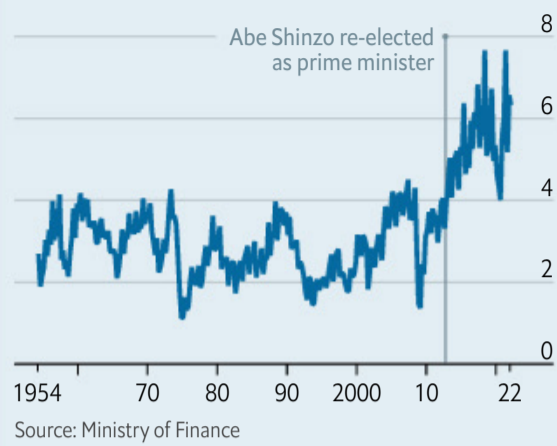
Why an arsenal designed to combat deflation remains on target today

ALITTLE LESS than eight years is not an especially long tenure for heads of government in much of the world. In Japan, it is a veritable aeon. And two years after the resignation of Abe Shinzo, a former prime minister who was assassinated on July 8th, the reforms he pushed in office look set to shape Japan's economy for years to come.

The current prime minister, Kishida Fumio, secured a big majority of seats in the upper house of Japan's legislature in the election on July 10th. His greater focus on equality and redistribution, which he calls "New Capitalism", was initially cast as an alternative to Mr Abe's vision. In reality, it will be built on the foundations his predecessor laid out. The programme which began after Mr Abe's 2012 thumping election victory—dubbed Abenomics—had three so-called "arrows" to dislodge Japan from its economic stagnation: flexible fis-

Yen gain

Japan, non-financial companies
Profit as % of revenue



cal policy, monetary expansion and structural reforms.

Clear positives stand out from Mr Abe's record, most notably the financial accounts of Japan Inc. Reforms to corporate governance encouraged more shareholder-friendly activity and prodded firms to reduce moribund networks of cross-shareholdings. Those changes, paired with a slump in the yen, boosted corporate earnings to record levels (see chart). An environment friendlier to investors also helped to raise anaemic levels of inward foreign direct investment. In 2020, direct investment into Japan was worth 1.2% of GDP, the highest on record.

There have been stark improvements in the labour market, too. Japan's female employment rates, previously low by the standards of rich economies, climbed rapidly under Mr Abe. At 72% among working-age women, the employment rate is now more than ten percentage points above the levels Mr Abe inherited, and six percentage points above the American equivalent. Kathy Matusi, the economist who championed increasing female participation as a way to unlock the productive potential of the Japanese economy, credits Abe-era reforms, such as mandatory disclosure on gender diversity and more generous salary replacements for new parents.

Mr Kishida's aides now talk less of ditching Abenomics and more of building its legacy. When his New Capitalism Council revealed its "grand design" document in May, it concluded that the strategy would adhere to the three-arrow framework. The strategy focuses, rightly, on the need to get firms to deploy their excess cash through wage increases or capital investments. Stagnant wages have been Abenomics's biggest shortcoming. At around 266,000 yen (\$1,940) per month in May, Japan's average wage has barely budged in a decade, and has actually fallen in real terms. Most of the recent rise in female employment reflects growth in part-time jobs that are usually poorly paid. This is where Mr Kishida could have the most to offer. Regretta-

bly, his approach to the issue so far differs little from Mr Abe's: tax incentives and browbeating, with a bit of a boost for public-sector workers.

Fiscal policy was a troubled area for Mr Abe, and is likely to remain one for Mr Kishida. Two long-planned but ill-fated increases in Japan's sales tax, in 2014 and 2019, made fiscal policy a drag on the recovery rather than a boost. Spending under Mr Abe was not as flexible as the first arrow's label would have suggested. After leaving office, Mr Abe did convince the party to soften its pledge to balance the primary budget (excluding debt-servicing costs) by 2025. But Mr Kishida is said to be more concerned about fiscal sustainability. His closest advisers have backgrounds in Japan's typically hawkish finance ministry.

Mr Abe's support for a more stimulative monetary policy has also lasted beyond his tenure, with mixed effects. Enormous purchases of bonds, and a subsequent policy to directly fix the yields of government bonds, may have prevented Japan from falling back into deflation, but failed to stimulate inflation or nominal-income growth as desired. As inflation rises globally, the Bank of Japan may find it harder to keep policy easy. But Mr Kishida will likely pick a continuity candidate when Kuroda Haruhiko, Mr Abe's central-bank governor, leaves office next April.

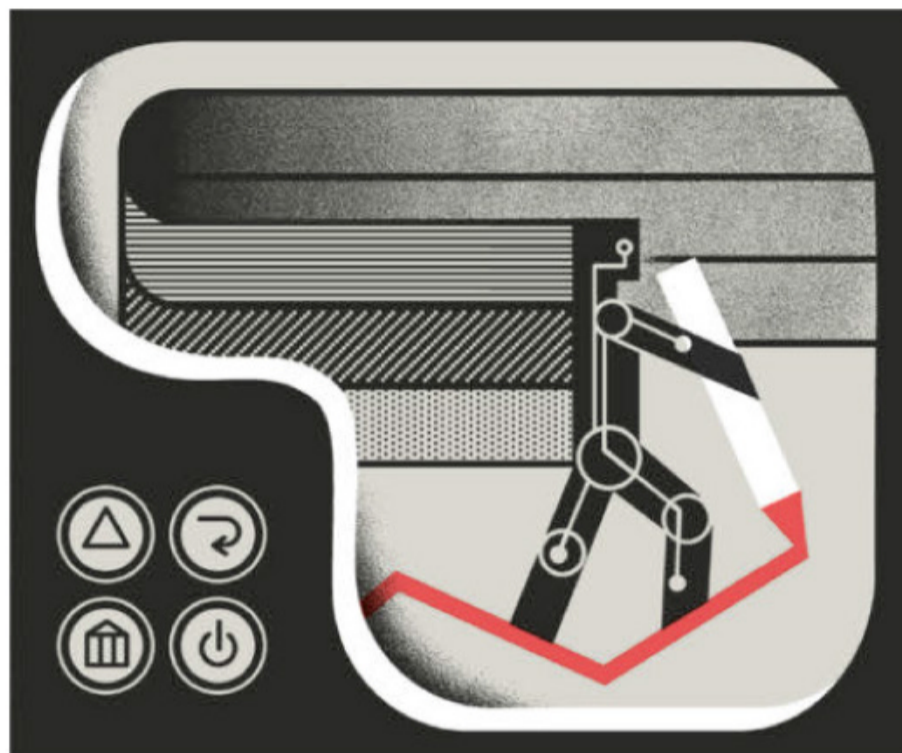
With Mr Abe gone, might Mr Kishida feel liberated to diverge further from his predecessor? Different global conditions could fuel such a change. Concern about fiscal discipline has more truck in a world of rising interest rates. But the differences between Mr Abe's and Mr Kishida's approach now look more likely to be a matter of degree rather than substance. Mr Kishida's focus on wages, in particular, could augment the successes of Abenomics if properly pursued. Mr Abe's arrows, in short, will remain essential weapons. ■



Lasting legacy

Free exchange | Disciples of discipline

The value and the limits of monetary-policy rules. The fourth in our series on the central-bank pivot



IT WAS A curious omission. In February, when the Federal Reserve published the winter edition of its semi-annual report to Congress, it dropped a normal section outlining the appropriate level of interest rates as determined by “monetary-policy rules”. Its inclusion might have been awkward, because it would have suggested that rates should be as high as 9%, when the Fed still had them near to 0%. In subsequent hearings at least three members of Congress pressed Jerome Powell, the Fed’s chairman, to explain its absence. Mr Powell promised that the section would be back in its next report. And so it was when the summer edition was published on June 17th—though only after the Fed had started to catch up to the rules’ prescriptions by rapidly raising rates.

As controversies go, the disappearance of a three-page section in a lengthy policy report was rather minor. It garnered scant media coverage. Nevertheless, it was important. It shone light on a decades-old question that is being asked with more insistence amid soaring inflation: should central banks limit their discretion and set interest rates according to black-and-white rules?

The search for rules to guide and constrain central banks has a long pedigree. It dates back to the 1930s when Henry Simons, an American economist, argued that authorities should aim to maintain “the constancy” of a predetermined price index—a novel idea in his era. In the 1960s Milton Friedman called for central banks to increase the money supply by a set amount every year. That monetarist rule was influential until the 1980s, when the relationship between money supply and GDP broke down.

Any discussion of rules today conjures up a seminal paper written in 1993 by John Taylor, an economist at Stanford University. In it he presented a straightforward equation which came to be known as the “Taylor rule”. The only variables were the pace of inflation and the deviation of GDP growth from its trend path. Plugging these in produced a recommended policy-rate path which, over the late 1980s and early 1990s, was almost identical to the actual federal-funds rate, the overnight lending rate targeted by the Fed. So it seemed to have great explanatory power. Mr Taylor argued that his rule might help to steer central banks on the right path for rates in the future.

However, just as the Taylor rule started to get attention from

economists and investors alike, its explanatory power grew weaker. In the late 1990s the recommended Taylor rate was consistently lower than the fed-funds rate. That sparked a cottage industry of academic research into alternative rules, mostly grounded by Mr Taylor’s original insights. Some put more weight on the GDP gap. Others added inertia, since central banks take time to adjust rates. Another group shifted from current inflation to forecasts, trying to account for the lag between policy actions and economic outcomes. In its reports the Fed usually mentions five separate rules.

The appeal of rules lies in their cold neutrality: they are swayed only by numbers, not by fallible judgment about the economy. Central bankers love saying that their policy decisions are dependent on data. In practice they sometimes struggle to listen to the data when their message is unpalatable, as it has been with inflation for the past year. Central bankers found numerous reasons, from the supposedly transitory nature of inflation to the limited recovery in the labour market, to delay raising rates. But throughout that time, the suite of rules cited by the Fed was unambiguous in its verdict: tightening was needed.

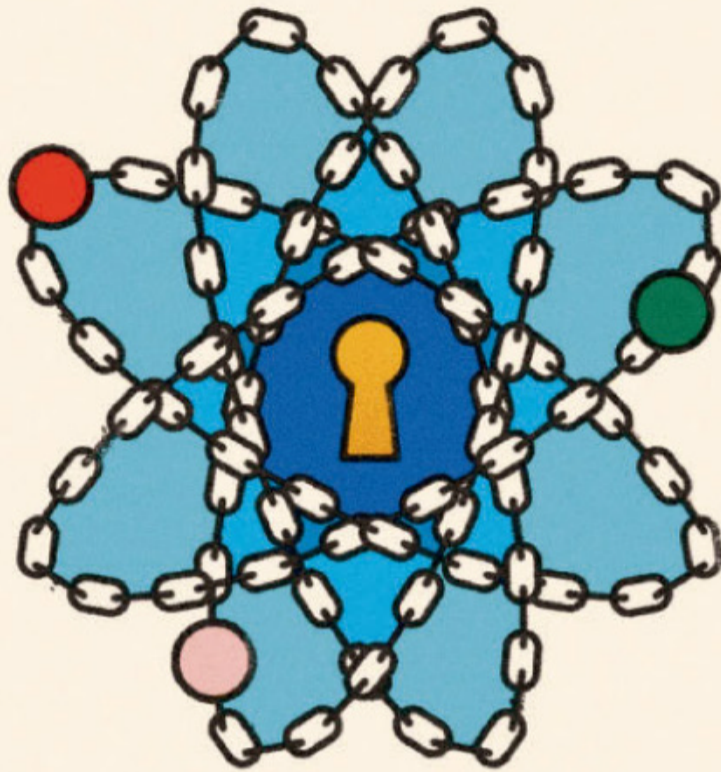
The rules are, however, not perfectly neutral. Someone first has to construct them, deciding which elements to include and what weights to ascribe to them. Nor are they as tidy as implied by the convention of calling them “simple monetary-policy rules”. They are simple in the sense that they contain relatively few inputs. But just as a bunch of simple threads can make for one messy knot, so a proliferation of simple rules has made for a baffling array of possibilities. For example, the Cleveland Fed publishes a quarterly report based on a set of seven rules. Its most recent report indicated that interest rates should be anywhere between 0.6% (per a rule focused on inflation forecasts) and 8.7% (per the original Taylor rule)—an uncomfortably wide range.

Moreover, each rule is built on top of a foundation of assumptions. These typically include estimates of the long-term unemployment rate and of the natural interest rate (the theoretical rate that supports maximum output for an economy without stoking inflation). Modellers must also settle on which of a range of inflation gauges to use. Slight changes in any of these inputs—common during periods of economic flux—can produce big swings in the rates prescribed by the rules. For example, an adjusted version of the Taylor rule, based on core inflation, would have recommended an interest-rate increase of a whopping 22 percentage points over the past two years (starting from negative 15%). Slavishly following such guidance would make for extreme volatility.

Average elegance

One possible solution is to combine multiple rules into a single result. The Cleveland Fed does just this, constructing a basic median out of the seven rules it tracks. Using this as a reference point, Mr Powell and his colleagues ought to have started raising rates gingerly in the first quarter of 2021 and should have brought them to roughly 4% today, more than twice as high as they actually are. That is much more sensible as a recommendation than the conclusion yielded by any single policy rule.

Such a median could never substitute for analysis of a range of data by central banks. But there is a big difference between taking rules seriously and treating them as holy writ. After all the inflation missteps of the past year, a healthy sample of rules deserves a closer look in policy debates. And they certainly deserve more prominence than they currently get as a short section in monetary reports that the Fed can choose to omit when inconvenient. ■



→ Also in this section

- 68 The James Webb telescope's debut
- 69 Jet fuel from bugs
- 70 Chemistry and wine-bottle glass
- 70 Elephants and cancer

Cryptography in the quantum age

Secrets squirrelled

A new generation of cryptography aims to blunt quantum computers' edge

IT IS NOT often that a bit of mind-bending mathematics can avert disaster. But researchers at America's National Institute of Standards and Technology (NIST) have done their bit: last week, after years of analysis, they gave their stamp of approval to some equations that might, in time, save untold petabytes of sensitive data from prying eyes.

The existing encryption standards that underpin just about every online exchange of information are a bit of gnarly mathematics designed to be well-nigh impossible for today's computers to crack without just the right arithmetical key. But NIST's scientists have not been pondering today's machines. They worry about a coming era of quantum computers.

These exploit the weirdness of the quantum world to perform calculations in fundamentally different ways from those used by conventional computers. This confers an enormous theoretical advantage in a small number of problem types—including identifying a large number's prime factors (numbers, divisible only by

themselves and one, that can be multiplied together to obtain the number in question) and computing the properties of points on functions called elliptic curves.

Both are used widely in cryptography. RSA, an algorithm based on factorisation, is employed alongside elliptic-curve cryptography in most internet connections, and in virtual private networks, messaging services including WhatsApp and Signal, and the anonymising web browser Tor. Yet both would crumble against a sufficiently advanced quantum computer running Shor's algorithm, developed in 1995 by Peter Shor, an American mathematician.

Storing up trouble

Exactly when this threshold will be reached is an open question. But progress seems to be accelerating. Some of the world's largest firms and a blossoming array of plucky startups and university spin-offs are working on the hardware (the actual computers), the error-correction (to provide fidelity) and the software (algorithms tuned to exploit quantum computers'

computational edge). The likelihood that building them will prove impossible, impractical or too expensive now seems small. That means a "cryptographically relevant" quantum machine is probably coming, and old defences will fall. A survey of experts, conducted in 2021, found a majority believed that by 2036, RSA-2048, an existing industry-standard encryption protocol that makes use of keys 2,048 bits long, could be broken within 24 hours.

That means the future development of quantum computers has worrying implications today. The most pressing threats come from "harvest now, decrypt later" attacks, in which encrypted data are collected *en masse* for quantum decryption when technology permits. Though little of today's internet chatter is likely to interest a hacker from, say, 2040, plenty of data—medical records, national-security communications or technical details of long-lived infrastructure—might retain their value until then. And data sent around willy-nilly today, on an assumption of impregnability, need not be strategically relevant to hackers for them to pose an embarrassment or risk to the businesses or officials who were doing the sending.

Colin Soutar, managing director at Deloitte Risk and Financial Advisory, a consulting firm, draws an analogy to the millennium bug. This was expected to cause chaos when computers with software that encoded years as two-digit values passed, at the turn of the millennium, from 99 to ▶▶

oo, and suddenly went back a century. Though it came to be viewed later as a tempest in a teacup, it was only diligent upgrading of the world's software that prevented digital disasters.

The analogy is not perfect. In the build-up to Y2K, as the millennium-bug scare was also known, the scale of the problem was unclear. But the timeline was certain. For Y2Q—as the quantum doomsday is sometimes called—the situation is reversed. In both cases, though, the message is the same: act now or pay later.

One path forward would be to use quantum-powered defences against a quantum-powered attack, deploying what is known as quantum-key distribution. That, though, requires expensive kit and dedicated connections. Governments and large companies might manage that, but smaller fry would find it hard.

A more promising approach would be to identify new classes of mathematical problems that even quantum machines would struggle to crack. This was NIST's task. In 2016 it launched a competition to find worthy algorithms for “post-quantum cryptography” (PQC), receiving 82 submissions from 25 countries. After three rounds of sifting and valiant searches for vulnerabilities by independent cryptographers, four winning techniques and four backup approaches have emerged.

The winners were all developed by consortia of academic and commercial researchers and all, as you might expect, involve melon-twisting mathematics best left to the experts. One called Kyber, the brainchild of a group called CRYSTALS (Cryptographic Suite for Algebraic Lattices; the name refers to abstruse groupings in number theory), is for general encryption. The remaining three propose digital signatures, which will allow senders to verify their identity reliably. Two also use lattices: CRYSTALS-Dilithium and FALCON (Fast Fourier Lattice-based Compact Signatures over NTRU, an acronym that allegedly stands for Number Theorists “R” Us).

The fourth winner was SPHINCS+. It won in part precisely because it does not use algebraic lattices and is therefore valuable if that approach should fail in the field. Its mode of encryption is based on hash functions, a mathematical technique often used in data compression.

NIST has four more options waiting in the wings that will be subject to a fourth round of examination; all of them use different mathematical concepts again to provide the uncrackability.

Coding the winning algorithms into practical software is expected to take until 2024, according to Dustin Moody, who led the competition. Brian LaMacchia, head of the security and cryptography team at Microsoft Research, worries that people will not start the PQC transition early enough.

The White House, though, issued a national-security memorandum in May, telling federal agencies to gird for a cryptographic transition and directing NIST to encourage the private sector to do likewise.

The sense of threat is rising. Mr Soutar says companies have already started approaching Deloitte with an eye to keeping themselves secure. EY, another consulting firm, also stresses that now is the time to move to PQC. To this end, both have formed partnerships with SandboxAQ, a spin-out from Alphabet, which hopes to commercialise post-quantum cryptography and is chaired by Eric Schmidt, one of Google's former bosses. After five years in “stealth mode”, these partnerships were announced publicly in March.

They are not alone. Mount Sinai Health System, a medical organisation in New York that runs eight hospitals and has 43,000 employees, is another of Sandbox-

AQ's clients. As Kirstin Myers, Mount Sinai's chief information officer, observes, the release of confidential patient data held by the organisation would constitute an “existential event”. With SandboxAQ's help, she hopes to avert that threat.

It is, of course, possible that some of the NIST algorithms will, themselves, be cracked. But though the new post-quantum algorithms come with no guarantee, neither do today's. Peter Schwabe, a cryptographer at Radboud University in the Netherlands who has been involved in developing both Kyber and SPHINCS+, therefore reckons the future lies in a hybrid approach. Rather than jettisoning existing encryption, he proposes retaining the algorithms currently in use and adding another post-quantum level: belt, then, as well as braces—always an advisable tactic if you do not want to get caught with your trousers down. ■



Astronomy

I'm in heaven

The James Webb Space Telescope is now open for business

AS SITES FOR celestial photoshoots go, the “Cosmic Cliffs” (above) were always going to be a safe bet. These stunning, textured peaks of dust and gas in the Carina nebula are light-years high. So the cliffs' appearance this week at the release of the James Webb Space Telescope's (JWST) first images was no great surprise. The JWST's predecessor, the Hubble Space Telescope, snapped the same region in 2005.

The difference between these vistas could not be more striking. The JWST, the largest space telescope ever built, has al-

ready spotted baby stars among the peaks that no previous observatory could manage. This week's snaps give just a hint of the thrilling programme of science to come.

The telescope was launched, after 11 years of delays and at a cost of \$9.7bn, on Christmas Day 2021. Its ballooning budget, even when split between NASA and the space agencies of Europe and Canada, almost got it cancelled. But it was too big to be sunk. Before lift-off, Thomas Zurbuchen, NASA's head of science, told *The Economist* that “The last thing we want to do is ▶▶

▶ save a billion dollars and fail.”

Seven months into the mission, every aspect of launch, deployment and performance seems to have gone according to plan, if not better. As a result, astronomers now have the most powerful tool yet given them to scan the cosmos in infrared frequencies of light. That will let them study many things they have struggled to examine in the past—in particular, the formation of stars and planets, from the universe’s youth to the present day.

Heat and dust

After its launch, the JWST manoeuvred its way to Lagrange 2, a point in space 1.5m km away where the gravitational fields of the Earth and the Sun conspire to create a gravity well. Here the alignment of the Earth and the Sun are such that the JWST’s shield can block illumination from both—a necessity, for the telescope’s infrared-detecting instruments need to be kept cold.

The JWST’s potential lies in a combination of its sheer size (its primary mirror, of gold-plated beryllium, is 6.8 metres across) and the cleverness of those four well-chilled detectors.

These are MIRI (which detects long infrared wavelengths), NIRCAM and NIRSpec (which take images of and analyse short-wave infrared) and FGS/NIRISS (which studies bright targets such as nearby stars orbited by exoplanets).

The wavelengths examined by MIRI correspond to objects such as exoplanets with no internal source of heat, and hotter but more distant bodies whose light has been stretched from visibility into the infrared by the expansion of the universe.

Given that “farther away” also means “longer ago” in cosmic terms, this will enable it to spot signs of the cosmic dawn, the moment when the universe’s first stars ignited. A “deep-field” image also released this week (see picture) is the first glimpse of that power; in it are features whose light set off more than 13bn years ago.

The infrared light that is the JWST’s speciality penetrates dust clouds more successfully than visible light can, thus tearing away the veil from intriguing pockets of the sky where dust is coalescing into stars and planets—places such as the Cosmic Cliffs.

The accuracy of the JWST’s launch meant midcourse corrections to put the telescope in orbit used less fuel than budgeted. That leaves more for the small adjustments needed to keep the instrument on station. Given that station-keeping is the main constraint on mission length, that matters. The initial goal was ten years, but NASA now reckons it can keep the telescope in place for 20. On top of this, all four instruments appear more sensitive than modelled, and thus capable of collecting 10-20% more photons than expected.



You can almost see the Big Bang from here

The release of this week’s clutch of images marks the conclusion of the telescope’s commissioning, a lengthy process intended to make sure it is fit for purpose. It is. Management will now be transferred to the Space Telescope Science Institute in Baltimore, which will have the thankless task of allocating time on it to eager astronomers. The good news is that the new estimates of its working life mean many more requests will eventually be fulfilled. The bad is that there may be a long wait. ■

Biotechnology

Green-sky thinking

Modified bacterial fungicides may propel the aeroplanes of the future

AVIATION HAS a problem. Though, at 2.5% of anthropogenic greenhouse-gas emissions, it is not a huge contributor to global warming, it is a high-profile one forecast to get bigger. Green moves are happening, including work towards using batteries or hydrogen for short-haul flights. Sustainable fuel made from biomass and waste products is already being used by some airlines. But what would solve the matter at a stroke is an all-new fuel, high in both environmental credentials and in energy density.

The hunt is on, then, for ways to make such a thing cheaply and from green feedstocks. And a group from Lawrence Berkeley National Laboratory, in California, think they have one. As they write in *Joule*, Pablo Cruz-Morales and Jay Keasling have worked out how to create cyclopropane (CP) rings, one of the energy-richest chemical structures found in hydrocarbons, using genetically engineered bacteria.

Atoms of carbon usually bond with up to four other atoms. When that happens these others arrange themselves at the vertices of a tetrahedron, meaning the angles between their bonds with the central carbon are 109.5°. CP rings, however, are composed of only three carbon atoms. That means the bond angles between those atoms are 60°. The acuteness of these angles puts great strain on the bonds. And strained bonds are energy-rich bonds.

Aeronautical engineers already know the value of CP rings. In the 1960s Soviet scientists used them in their design of Syntin, a rocket fuel that propelled the upper stages of Soyuz and Proton launchers. But making Syntin and other synthetic polycyclopropanated (POP) compounds remains hard and expensive—and usually involves a fossil-fuel feedstock.

Dr Cruz-Morales, Dr Keasling and their colleagues, however, took inspiration from a substance called jawsamycin, an antifungal molecule produced by *Streptomyces roseoverticillatus*, a common soil bacterium. This is one of only two known natural POP compounds. It is chock-full of CP rings. Indeed, its name hints at the shark’s-tooth-like outlines of the CP triangles.

Dr Keasling is no stranger to co-opting single-celled organisms. Over a decade ago his laboratory engineered a biosynthetic pathway to produce artemisinin, an anti-malarial drug hitherto obtained from a Chinese herb. Artemisinin-based therapies have since become the weapon of choice in many malarious countries. The team applied a similar approach, tweaking enzymes from a variety of sources to create an artificial metabolic pathway that starts with sugar and ends with the desired product—in this case one of a range of chemicals belonging to a group called POP fatty-acid methyl esters (POP-FAMES).

These are powerful enough to fuel aircraft. Many have energy densities greater than 40 megajoules per litre, more potent than most widely used rocket and aviation fuels, which average 35MJ/l.

A good start, then. But if bio-POP-FAMES really are to replace existing jet fuel, they will have to be made cheaply. People will pay a premium for a life-saving drug; for jet fuel, not so much. And drugs do not need to be produced in quantity. Fuels do.

The researchers hope these problems are surmountable. Not that long ago, after all, solar cells were exotic products associated more with satellites than with Earthly power. Now they are as cheap as chips.

One approach might be to involve America’s air force, which has expressed interest in green aviation fuel. A guaranteed market, unconstrained by commercial considerations, would allow scaling up without fear of being crushed by fossil-fuel-based competition. If that worked, then the big time would beckon. ■

Wine bottles

A pour decision

Experiments show that clear glass wine bottles are usually a silly idea

ONOPHILES MAY have noticed a disturbing recent trend. Whites, hitherto normally sold, like their red cousins, in green bottles, are now starting to appear in clear ones. This is reckoned to boost sales by showing off the liquid within. But, though it may entice the eye, such packaging gives the nose reason to despair. Light is a potent driver of chemical change. And a study by Silvia Carlin, Fulvio Mattivi and their colleagues at the Edmund Mach Foundation, in northern Italy, published in the *Proceedings of the National Academy of Sciences*, shows it is right to be concerned.

Lightstrike, known to the French as *gout de lumière*, occurs when incoming photons trigger undesirable photochemical reactions that leave wine smelling of “boiled cabbage”, “wet dog” or (*quelle horreur!*) “Marmite”. Some are more susceptible than others. Reds are generally protected by their tannins and pigment molecules known as anthocyanins. Whites, less so.

But even here there is variation. Pudding wines, often bottled in clear glass, are able to rely on their heavy aromatic profiles to hide any faults that develop. In more delicate tipples the damage can happen fast. Dr Carlin and Dr Mattivi found a mere week’s exposure to conditions like those on a supermarket shelf sufficient to ruin a wine’s aroma.

They first studied nine bottles each of 20 white varieties. A third of these bottles were made of clear glass and kept in the open, in the sort of illumination found in a supermarket. Another third, similarly illuminated, were green. A third third, as it were, also made of clear glass, were kept inside cardboard boxes intended to exclude any light. After 60 days the researchers then assessed each bottle’s “smellprint”, using gas chromatography to extract and separate volatile compounds.

As they expected, the smellprints clumped together based on both grape type and bottle. Chardonnay and pinot gris showed the biggest sensitivity to light. Stored in the open in clear bottles they eventually became indistinguishable.

Focusing on these two varieties permitted the researchers a closer look at how the wines’ smellprints changed over the course of 50 days. They identified which odiferous compounds were most light-sensitive and therefore most likely to play a role in lightstrike.

One that they found responded particu-

larly badly was beta-damascenone. This gives notes of baked apple, quince or flowers. In a clear bottle, concentrations of this molecule decreased by 65% after a week. In a green one, even after 50 days it had fallen by only 40%.

Another victim was geraniol. This contributes to the roselike, fruity or citrus aromas of some wines. In clear bottles its concentration fell 30-45% after 21 days. That compared with a decrease of 25% after 50 days in green bottles, and no decline in those in boxes.

In addition to losing these desirable aromas, new foul-smelling ones emerged. For example, the quantity of 4-hepten-1-ol, reminiscent of fish and rancid oil, doubled in clear-bottled chardonnay and tripled in one type of pinot gris. It increased by only 10-20% in the green bottles. The result, then, is a big “thumbs down” to clear bottles. As is often the case, traditions are there for a reason. ■

Oncology

Protein shake-up

Why elephants rarely get cancer

ELEPHANTS HAVE always presented a paradox to biologists. They are much larger than humans and live for a similar length of time, yet they only rarely develop cancer. That is odd. Cancer, after all, is something of a numbers game: the more cells, the more replications. The more replications, the greater the likelihood of random DNA damage and a cell going rogue, failing to be detected and ultimately starting the runaway process towards a tumour.

Work led by Konstantinos Karakostis of



Oh, is that how I got so long in the tooth?

the Autonomous University of Barcelona and published in *Molecular Biology and Evolution*, points to an answer, for elephants at least, to Peto’s paradox. This absence of size-to-cancer correlation is named after Sir Richard Peto, a British epidemiologist who first noted it in 1977.

Their investigations began with p53, a transcription factor. These are the proteins that are in attendance as DNA is transcribed into RNA, controlling which genes are switched on and for how long.

But p53 is also in the business of marshalling resources in the service of quality control. When it encounters damaged DNA, it fails to bind to yet another protein called MDM2. That in turn sets off a chain of events that stimulates a cell to repair any damage. If that fails, p53 initiates a different chain that makes the cell destroy itself.

p53, then, is a potent anti-cancer agent in the body’s arsenal. But cancer, in many creatures, is a potent adversary. Cancer cells have damaged DNA but have ways to ensure the binding to MDM2 happens without a hitch. The first step in quality control is evaded, and the last steps—repair or self-destruct—are never reached.

Most animals play host to but one type of p53. So the discovery last year that elephants have 20, each subtly different, drew the attention of Dr Karakostis and his colleagues. Maybe the p53s provide one another with anti-cancer backup. But how?

They suspected that MDM2 was involved. Perhaps all those slightly different p53s latch onto it in slightly different ways. It would be less likely, the idea goes, that cancer cells’ trickery could work in 20 altered arrangements. If any failed, the chain of repair would still be triggered.

First the team took to their computers. Extensive simulations of precisely how MDM2 binds at the molecular level to this plethora of p53s indicated their hunch might be right. A trip to the laboratory, to study that binding in a dish, only confirmed things further. Cancer cells might have defences clever enough to smooth the route to one kind of binding—but not, it is now assumed, 20 of them.

Peto’s paradox lives on, however. Why have humans not evolved this variegated gang of anti-cancer proteins, or indeed the different suite of cellular protections enjoyed by blue whales, if they would confer such a clear-cut survival benefit?

Alas, a common refrain in matters scientific: more research is needed. But that is not to say this work is without potential relevance to humans. Work reported in 2016 revealed that genetically engineering mice to have a few extra copies of p53 enhanced their cells’ ability to detect and repair DNA damage. This latest work suggests something many managers are belatedly finding out: success comes not just with a bigger team, but a more diverse one. ■



Summer reading

Pages in the sun

Our correspondents recommend books, old and new, on their beats. For our full shelf of reading lists, go to economist.com/economist-reads

Biography

The Twelve Caesars. By Suetonius. Translated by Robert Graves. *Penguin Classics*; 464 pages; \$16 and £10.99
An extraordinary series of portraits of the men who, in their time, were the most powerful in the world. Among the palace coups and military campaigns come sudden, arresting personal details: it is impossible to forget Tiberius rubbing a man's face with a crab, or Augustus's demands that things should be done "quicker than boiled asparagus".

A Portrait of the Artist as a Young Man. By James Joyce. *Penguin Classics*; 384 pages; \$11 and £8.99
This is autobiography as great literature, delivered in a voice that is at first a child's, then a boy's, then that of the young poet determined to live by "silence, exile and cunning". Though the author wears the alias of Stephen Dedalus, there is never much doubt that this is his own tortured

youth in Dublin. A supreme description of the alternating beauties and horrors of orthodox Catholicism to a teenage mind.

Portrait of the Artist as a Young Dog. By Dylan Thomas. *New Directions*; 123 pages; \$13.95. W&N; £8
A riposte to Joyce, and again biography as literature, this time in the rampaging voice that sounds through the author's poems and in "Under Milk Wood". The book tracks the life and adventures of an unruly cub reporter roaming the streets of Swansea, learning how to drink, smoke and womanise. Life is remembered through the transcending eye of the poet, perhaps the truest lens of all.

→ Also in this section

- 73 The Norman conquests
- 74 Ottessa Moshfegh's new novel
- 74 Music and resistance in Egypt
- 75 Johnson: The rules that matter

Brief Lives. By John Aubrey. *Boydell Press*; 336 pages; \$29.95 and £16.99
A collection that includes many of the most prominent figures of a fascinating age: Francis Bacon, Robert Hooke, Edmund Halley, John Milton. It feels like the work of an antiquarian in a dressing gown, fishing up from memory snippets of past conversations, sightings and gossip. The mini-biographies are a chaotic mixture of achievements, very often in the sciences, with vivid glimpses of oddness.

Financial crime

Treasure Islands. By Nicholas Shaxson. *Palgrave Macmillan*; 272 pages; \$18.99. *Vintage*; £10.99
Now more than a decade old, this is still the best introduction to the world of tax havens. The book is particularly good on Britain's "second empire": its network of overseas territories, from Jersey to the Cayman Islands, the growth of which was driven by moneymen looking to create a tax- and regulation-free "elsewhere".

The Despot's Guide to Wealth Management. By J.C. Sharman. *Cornell University Press*; 274 pages; \$29.95 and £23.99
The book to turn to for the lowdown on "grand corruption": the theft of national wealth by kleptocratic leaders and their cronies, often in poor (albeit resource-

rich) countries. Why, the author asks, is it so difficult to hold kleptocrats accountable? A big part of the problem is that financial crime straddles borders and recovering assets requires international co-operation that is still largely absent.

Butler to the World. By Oliver Bullough. *St Martin's Press*; 288 pages; \$28.99. *Profile Books*; £20

As well as being the centre of a global offshore web, Britain is itself a giant financial laundromat. After the second world war, as its empire dwindled, the country decided to carve out a new role as a home for footloose international capital, this book argues. Nowhere else offers a comparable array of enablers, from banks and lawyers to public-relations firms and other "reputation managers".

Billion Dollar Whale. By Tom Wright and Bradley Hope. *Hachette Books*; 416 pages; \$18.99. *Scribe*; £9.99

A rip-roaring case study in kleptocracy, focused on the \$4.5bn looting of 1MDB, a Malaysian state investment fund. The scandal ensnared not only Malaysian politicians and their bag-men but also Hollywood and Wall Street bigwigs. The book lifts the lid on how white-collar criminals use libel and privacy laws to stymie journalists seeking to expose their sins—and on the dangerous temptation to see financial crime as victimless because of its abstract nature.

France

De Gaulle. By Julian Jackson. *Belknap Press*; 928 pages; \$39.95. *Published in Britain as "A Certain Idea of France: The Life of Charles de Gaulle"*; *Allen Lane*; £35

To understand France today, consider the figure whose shadow looms over the country half a century after he left office: Charles de Gaulle. This biography deftly blends meticulous first-hand research with historical narrative to unpick the vision, flair and flaws of the leader who "exhorted the French to believe in themselves as a 'great' nation".

Left Bank: Art, Passion and the Rebirth of Paris, 1940-1950. By Agnès Poirier. *Henry Holt*; 352 pages; \$30. *Bloomsbury Publishing*; £25

After the second world war radical philosophy, intellectual effervescence and anti-bourgeois style took hold on the *rive gauche* in Paris. This book centres on the streets and boulevards around the Café de Flore, in which aspiring writers and thinkers shared views, cigarettes and beds. The French still treat their public intellectuals as treasures: this is a reminder of where that fashion began.

Discretion. By Faïza Guène.

Translated by Sarah Ardizzone. *Saqi Books*; 240 pages; £12.99

This bittersweet novel follows Yamina Taleb, an Algerian woman who has suffered a double exile—first to Morocco during the Algerian war, then to Seine-Saint-Denis north of Paris after an arranged marriage. The tale is told through the eyes of the protagonist's French-born adult children, and captures many of the tensions that tug at second-generation immigrant families in France today with honesty, humour and warmth.

Returning to Reims. By Didier Eribon.

Translated by Michael Lucey. *Semiotext(e)/Foreign Agents*; 256 pages; \$17.99. *Allen Lane*; £9.99

A short, sobering account of a French sociologist's return to his working-class origins after the death of his father. The tale is partly a personal reckoning, but it is also an exploration of why the social milieu in which the author grew up turned its back on the hard left and communism, and looked to the far right for salvation instead. A book that illuminates the disillusion and anger behind the vote for the extremes today.

Latin America

Conquistadores. By Fernando Cervantes. *Viking*; 512 pages; \$35. *Penguin*, £12.99

A balanced retelling of the Spanish conquest of the Caribbean, Mexico and Peru, which draws heavily on the letters and diaries of those involved. The author chronicles the brutality of the invaders but seeks to judge them by the values of their own times. The behaviour of Hernán Cortés and the rest was nurtured by a late-medieval religious culture, not purely by the lure of gold and still less by modern notions of statehood, he argues.

News of a Kidnapping. By Gabriel García Márquez. Translated by Edith Grossman. *Vintage*; 304 pages; \$17. *Penguin*; £8.99

An unsurpassed journalistic account by Colombia's most famous novelist of the horror inflicted by Pablo Escobar, the murderous drug-trafficker from Medellín, in the late 1980s and early 1990s. It focuses on the kidnapping of Diana Turbay, a journalist and daughter of a former president, tracing the agonising choices of officials torn between national interest and personal ties.

The Feast of the Goat. By Mario Vargas Llosa. Translated by Edith Grossman. *Picador*; 416 pages; \$20. *Faber & Faber*; £8.99

Peru's Nobel-prizewinning novelist is at his psychologically probing best in this



fictionalised account of the moral corruption and political repression of the dictatorship of Rafael Leónidas Trujillo, the self-styled Generalissimo who ruled the Dominican Republic from 1930 until his assassination in 1961.

Beef, Bible and Bullets. By Richard Lapper. *Manchester University Press*; 272 pages; \$29.95 and £11.99

A readable account of how Jair Bolsonaro won Brazil's presidency in the election of 2018 through a culture war that forged an ad hoc coalition of farmers, evangelical Protestants and the security forces. The book takes in some of the damage that Mr Bolsonaro has inflicted on the country and its democracy.

Silicon Valley

The Dream Machine. By M. Mitchell Waldrop. *Stripe Press*; 528 pages; \$20 and £18

J.C.R. "Lick" Licklider, an early employee of the Pentagon's Advanced Research Projects Agency (which later became DARPA), was a visionary with a budget. He used military money to fund projects that led to the advent of personal computers, notably ARPANET, precursor to the internet. A reminder that Silicon Valley originated not in startups but in universities and government.

Dealers of Lightning. By Michael Hiltzik. *Harper Business*; 480 pages; \$17.99. *Orion Business*; £18

Many of the 20th century's important inventions were products of corporate-research labs. The greatest belonged to Xerox, a photocopier manufacturer. Starting in 1970, its Palo Alto Research Centre

▶ (PARC) pioneered personal computing. This pacy book shows how, by adopting DARPA's free-for-all approach to research, PARC became a hub of innovation.

Steve Jobs. By Walter Isaacson. *Simon & Schuster*; 630 pages; \$35. *Little, Brown*; £25
A balanced portrayal of Apple's co-founder, drawing on hours of interviews, which explores both his achievements and his difficult personality. That proved to be as influential as his products: Jobs's "reality-distortion field", which inspired cult-like loyalty, has been widely emulated.

No Filter. By Sarah Frier. *Simon & Schuster*; 352 pages; \$28. *Random House Business*; £9.99
A captivating account of the rise of Instagram, one of the modern Valley's successes. Most riveting are the passages on the platform's acquisition by Facebook for \$1bn in 2012, which offer insights into the negotiating tactics of Mark Zuckerberg and Jack Dorsey of Twitter.

The history of Western capitalism

The Worldly Philosophers. By Robert Heilbroner. *Touchstone*; 368 pages; \$18.99. *Simon & Schuster*; £8.99
The best book for anyone interested in the history of economic ideas—not least because it is short, conversational and can be read in a few hours. First published in 1953, it covers some of the most consequential early economists, from Adam Smith to Thomas Malthus to Karl Marx, explaining what they thought and why.

A Culture of Growth. By Joel Mokyr. *Princeton University Press*; 424 pages; \$22.95 and £17.99
Why was Europe the first region to industrialise? How did the concepts of free debate and free markets become embedded in everyday life? Geography probably helped: a firebrand intellectual who incurred official wrath could easily move to another European state. Elsewhere, free-thinkers had few escape routes.

The Hundred Years' War, Volumes 1-4. By Jonathan Sumption. *University of Pennsylvania Press*; 3,320 pages; \$170. *Faber & Faber*; £84
This series is set long before capitalism got going. The Hundred Years' War, in effect a French civil war that England egged on, began in 1337 (shortly before the Black Death) and finished in the mid-15th century. But the books show how different governance and politics were before capitalism, and thus what changed from the 18th century onwards. Kings did not care about economic growth, or even know what it was: they wanted glory. ■

The Normans

They stooped to conquer

Empires of the Normans. By Levi Roach. *Pegasus Books*; 456 pages; \$29.95. *John Murray*; £25

FOR MANY years, a Viking host led by a charismatic brigand, Rollo, had been pillaging up and down the Seine. But when he overextended himself with an attack on the cathedral city of Chartres in 911, Rollo's forces were given a bloody nose by the Frankish magnate Robert of Neustria. Robert knew this was only a temporary reprieve and advised the king, Charles the Simple, to cut a deal with Rollo while the going was good. They offered land between the Epte and the sea and marriage to Charles's daughter, Gisla.

In exchange Rollo would make a pledge of service to the king (including protection from other Vikings) and convert to Christianity. He had no hesitation in accepting the terms while demanding (and getting) yet more territory. But when it came to displaying gratitude by kissing Charles's feet, as custom required, he got one of his men to do it. Also refusing to kneel, Rollo's henchman simply grabbed the king's ankle, pulled the royal foot to his lips and sent the monarch sprawling. The symbolism could not have been clearer.

Over the next three centuries, Rollo's Norman successors—his great-great-grandson was William the Conqueror—turned Normandy into the most politically and militarily cohesive territory in what would become France. From there they set forth to dominate much of western and southern Europe, carving out king-



Rollo does Paris

doms in England, the south of Italy, Sicily and the Holy Land. Exactly 301 years after Rollo's refusal to bend the knee, the 17-year-old Frederick II was being crowned in Mainz as king of the Germans and Holy Roman Emperor in waiting. Young Frederick was a Norman from Apulia.

Yet even at what seemed to be the apotheosis of Norman power and influence, the idea of what it was to be one was becoming elusive. By assimilating and marrying wherever they showed up, the Normans willingly blended their identity with the locals'. By the time of Frederick's coronation, Normans in England, although still French-speaking, thought of themselves as English. Normandy itself had been lost by King John to the French crown, while the multicultural Kingdom of Sicily was now part of the Holy Roman Empire. In another 100 years, brooding castles and soaring churches would be the only distinctively Norman features left.

Tellingly, the title of Levi Roach's book is "Empires of the Normans", not "The Norman Empire". The grip Rollo's descendants exerted on Europe and the Middle East was more the result of a militarised diaspora, vaulting ambition and crafty opportunism than of conscious empire-building. Even their genuine Christian piety served a practical end. Successive popes lent a cloak of legality to Norman land-grabbing when it suited their political purposes.

Some of the ground covered by the book may be familiar to history buffs: from the high-stakes conquest of England to the fighting qualities that Normans brought to the near-miraculous triumph of the First Crusade. But by telling the story from their perspective and following them wherever they went—from Italy to the Balkans and Asia Minor, from England into Wales, Scotland and Ireland and from southern France into Iberia—Mr Roach gives a powerful account of how prowess in combat, shrewd alliance-building, low cunning and sheer chutzpah let them punch above their numerical weight.

It is a pity that the narrative sometimes drags as he tracks the exploits of so many Williams, Roberts, Rogers and Henrys (noble Norman families ran a bit short on names). Extraordinary characters such as Roger II of Sicily could have been better dramatised with more direct quotation from the lively primary texts. For instance, in her "Alexiad", Anna Komnene, daughter of the Byzantine emperor Alexios Komnenos, is both fascinated and repulsed by Bohemond, the future Prince of Antioch: he is "perfectly proportioned" but a "supreme mischief-maker". The result is an indelible picture of the warrior-politician.

Mr Roach has diligently mined the sources, but rather fussily deplores their bias and exaggeration. A flashier historian would have had no such qualms. ■

Grotesque fiction

Ignoble lords

Lapvona. By Ottessa Moshfegh. Penguin Press; 320 pages; \$27. Jonathan Cape; £14.99

OTTessa MOSHFEGH is a writer of great if inconsistent talent, whose output is both prolific and eclectic. Her new book, “Lapvona”, is her strangest yet—which, in her case, is saying something.

“Eileen”, her acclaimed first novel (published in 2015), told the story of a volatile young woman from New England in the early 1960s, delving into her bitter paranoid and twisted erotic fantasies. “My Year of Rest and Relaxation” (2018) saw a young woman drug herself into insensibility with the help of a sinister psychologist. “Death in Her Hands” (2020) was framed as a mystery, yet withheld most of that genre’s satisfactions. It seemed wilfully rebarbative, a rejection of the idea of reading for pleasure.

“Lapvona” is the name of a fictional medieval village in an unnamed European country. Marek, the hero, is the disabled son of a shepherd, Jude. The village is beset by disasters, natural and man-made—the story opens with a murderous raid by bandits and much of the second half takes place during a drought. Marek’s mother is said to have died when he was a baby; he was brought up by his brutal father and a wise-woman, Ina, from whose withered breasts he still suckles as a teenager. The village is kept subdued by the twin forces of a strict, self-flagellating religion and a cruel feudal system that seeks to disempower residents at every step.

Perched on a hill above it is a castle. There lives Villiam, a vain and merciless nobleman surrounded by courtiers who serve his increasingly luxurious whims. Villiam’s son, Jacob, is a handsome, hearty young man who occasionally deigns to wander down to the village. He runs into Marek, who picks up a rock and, as a storm rages around them, sets in train a series of transformative events.

Despite its medieval milieu, “Lapvona” is a quintessential Moshfegh book. It has the warped earthiness of the author’s first two novels, featuring incest and sundry other perversions. There is a powerful undercurrent of allegory—the distance between reader and setting only emphasises how little has changed for those at the bottom of the economic ladder. Here everything is corrupt, all motives are grubby, and you feel you need a shower to rinse the book off once you put it down. ■



Music and resistance

From El-Salam to the world

CAIRO

Egypt’s authorities are trying—and failing—to crack down on *mahraganat*

AS THEY NAVIGATE the narrow streets of Cairo, tuk-tuk drivers blast *mahraganat* from their speakers. The music’s sound is distinctive: the Egyptian *ri’* (tambourine) and *tabla* (drum) are combined with electronic beats, and performers both sing and rap. For a while *mahraganat*—meaning “festivals”—was enjoyed mainly by the working classes and tolerated by the authorities. Now that it is more widely popular, officials are trying to silence it.

Mahraganat was born in El-Salam city, a down-at-heel outer suburb in eastern Cairo, in the late 2000s. Performers reflected on everyday experiences, ranging from lost slippers to rising unemployment and police brutality. “These lyrics are important because they give a voice to the voiceless,” says an Egyptian anthropologist who, tellingly, does not want to be named. The songs, she says, are “a loud cry from an invisible part of Egypt”.

Often the music was produced locally, distributed on USB sticks and played at weddings. But *mahraganat* quickly spread beyond El-Salam and became the sound of working-class Egypt. Some in the country’s elite thought this elevation of ordinary life was in poor taste. The songs were rarely played on the radio; performers were not invited to appear on television.

Yet as a genre that documented society’s ills as well as being catchy, *mahraganat* found new fans during the Arab spring of 2011. The beats could be heard on univer-

sity campuses, in hotel lobbies and blasting out of cars. The clampdown on the music intensified after Abdel-Fattah al-Sisi came to power in a coup in 2013. The Egyptian Musicians’ Syndicate, a state-affiliated organisation that aims to cultivate national taste, decided *mahraganat* was “vulgar”. In fact, it was subversive. “If you want to forget those who oppress you,” one song advises, “smoke weed.”

Sara Ramadan of the Association for Freedom of Thought and Expression, a human-rights group, says that under Mr Sisi artists have been “encouraged to present an optimistic image of Egypt, and avoid reference to the military and police. The syndicate began enforcing this vision by restricting these artists.” *Mahraganat* musicians began to be fined for performing without a licence issued by the syndicate. After “Bent el-Geran”, a song that mentions drugs and alcohol, went viral in 2020, they were even banned from playing in private venues. Later the syndicate stipulated that some performers had to apply for new licences every year.

In 2021 at least 19 *mahraganat* musicians lost their licences or were unable to get them, in what seemed a bid to throttle their careers. The syndicate, which did not respond to requests for comment, also asked YouTube to remove some *mahraganat* content (the videos are still up). Among the targets of the bureaucracy was Hamo Bika, the singer whose lyrics recommend-▶▶

▶ ed marijuana. Refused a licence more than once, he has been castigated for the perceived crassness of his music, his failure to pass a classical vocal test and inability to file the right paperwork. In March he and Omar Kamal, a fellow singer, were given fines and suspended sentences for “violating family values” in a clip they posted of a belly-dancer grooving along with them.

The restrictions reflect the increasing stifling of artistic freedom in Egypt—but so far they have been ineffective. In a digital age it is hard to silence entire genres. Mr Bika’s videos have millions of views on

YouTube. “Moon Knight”, a recent Marvel series partly set in Egypt, included a *mahraganat* song called “El Melouk” in an early episode. In April that track appeared at number 15 on *Billboard*’s world-music digital-sales chart; overseas, it is now the top Egyptian song on Spotify, almost 90% of streams coming from outside the country.

More may follow where “El Melouk” has led. Reservoir Media, a music company based in New York, hopes *mahraganat* will take off among Western listeners as *reggaeton*, a dance genre popular in Latin America, did in the late 2010s. It has signed a deal

with Mohamed Ramadan, an actor and singer, bought an Egyptian label and hopes to cultivate new talent from the region. “Our interest is in new music that is culturally relevant,” says Golnar Khosrowshahi, Reservoir’s boss. “And this fits the bill.”

Conservatives lament all this, fearing foreigners will think *mahraganat* represents Egypt’s tastes. It may soon be a big cultural export whether the authorities like it or not. After “El Melouk” made the charts, one of the musicians posted the list on social media, adding his own caption: “From El-Salam to the world.” ■

Johnson Distinctions with a difference



How to tell the valuable language rules from the piffling

“SHALL I COMPARE thee to a summer’s day?” So begins one of the most famous poems in all of English literature. It is also one of the most frequently cited in usage books. Shakespeare’s “Sonnet XVIII” is offered as support for the notion that “compare to” means to express a likeness, whereas “compare with” is used for contrasts.

But the picture is not simple. Shakespeare goes on to say that the woman he is addressing is “more lovely and more temperate” and that she, unlike a summer’s day, will never fade. Some commentators say, then, that the rhetorical question is meant to be answered with a “no”, because of the differences he then stresses. In that case, though, what follows is a textbook example of comparing her “with”, not “to”, a summer’s day. The guidebooks that simply cite the poem as illustrative of “compared to” have more explaining to do.

Some readers will applaud the careful distinction of “compared to” and “compared with”. Or you may be hearing of this difference for the first time, despite being English-speakers and proficient readers. That is because it belongs to a category of distinctions in English that might be better understood as attempts at neatening the language than as long-standing, clear rules.

“Merriam-Webster’s Dictionary of English Usage” examined many literary examples of “compare” followed by “with” and “to”. Its editors found that after the active form (*compare*) the distinction is kept more often than not, but scarcely uniformly. After the past participle (*compared*) the variation is in effect random. In the end, “The rule can be looked upon as a guide that you may choose to observe if you wish to. Many writers obviously do not.”

Good usage gurus grasp that formulating neat rules can be tough. H.W. Fowler, one of Britain’s greatest, endorsed the *compared to/with* rule in his usage guide of 1926, but conceded that they are often hard to tease apart. Sometimes a comparison both draws a likeness and illustrates contrast, as Shakespeare’s does. The problem is that rules have a way of being simplified with repetition, until they wind up in a stark and simple form that conflicts with how the language actually works.

Yet careful writers and keen readers know that some distinctions are genuinely vital, and that eroding these invites confusion. It is clear enough why people mix up *flout* and *flaunt*, including sensible writers who are in a hurry. Not only do they sound similar; both involve acting with a kind of insouciant brio. But if you flout the distinction, warns *The Economist*’s style guide, you risk appearing to flaunt your ignorance.

Relaxed observers sometimes note that language changes, as though nothing can be done about that, and, since the process is natural, nothing should be attempted.

But two distinct words collapsing into one really can rob the language of valuable subtlety. Using *strategy* for *tactics*—one is how you win a war, the other how you win a battle—should unsettle not only military experts. Even in metaphorical uses such as in politics, day-to-day skirmishes are different from the long-term plan. Some people are good tacticians and lousy strategists.

It is true that if a change advances far enough, it is unlikely to be stopped. Further along that line is *decimate*, a word once meaning “to destroy a portion of” (or “a tenth of”), but now used as a synonym for *annihilate*. The distinction, if it can be kept, is useful, since there is no good synonym for the old *decimate*. Other changes in meaning may be almost complete: though *celibate* once meant “unmarried”, it is so much more often used to mean “abstaining from sex” that many people are surprised to learn the original meaning. In any case, “unmarried” does the old job just fine. Holding out for the original “celibacy” is quixotic.

So when examining a proposed fine distinction in the language, it is worth remembering a trio of criteria: it should be clear-cut, long-standing and useful. Commentators have proposed rules rigidly separating *that* from *which*, *among* from *between*, *for* from *because* and *more than* from *over* (among many others). But in these cases, actual practice has been a jumble over time, because the meanings are so close, and because the proposed distinctions add so little value in clarity. Some rules separating words really are critical—but they must earn their keep.

Which are which can be hard to tell. But if you can take the time to distinguish *compared to* from *compared with*, discerning those rules worth fighting for is surely worth the effort too.



Economic data

	Gross domestic product				Consumer prices			Unemployment rate		Current-account balance		Budget balance		Interest rates		Currency units					
	% change on year ago		2022†		% change on year ago		2022†		%		% of GDP, 2022†		% of GDP, 2022†		10-yr gov't bonds		change on year ago, bp		per \$		% change on year ago
	latest	quarter*			latest								latest,%		latest,%		Jul 13th		Jul 13th		
United States	3.5	Q1	-1.6	2.3	9.1	Jun	7.8	3.6	Jun	-4.3		-5.9	2.9		149		-				
China	4.8	Q1	5.3	4.0	2.5	Jun	2.1	5.9	May‡§	2.5		-6.2	2.6	\$\$	-19.0		6.72			-3.9	
Japan	0.4	Q1	-0.5	2.1	2.4	May	2.2	2.6	May	1.4		-6.0	nil		-8.0		137			-19.6	
Britain	8.7	Q1	3.1	3.6	9.1	May	7.3	3.8	Mar††	-2.9		-5.1	2.2		147		0.84			-14.3	
Canada	2.9	Q1	3.1	3.6	7.7	May	6.7	4.9	Jun	1.2		-3.5	3.2		181		1.30			-3.9	
Euro area	5.4	Q1	2.5	2.6	8.6	Jun	7.2	6.6	May	2.6		-4.4	1.1		143		0.99			-14.1	
Austria	9.5	Q1	10.0	3.5	8.7	Jun	7.0	4.8	May	-1.3		-4.7	1.7		178		0.99			-14.1	
Belgium	4.9	Q1	2.2	2.0	9.6	Jun	9.2	5.5	May	-1.3		-3.8	1.8		181		0.99			-14.1	
France	4.5	Q1	-0.8	2.2	5.8	Jun	5.5	7.2	May	-1.4		-5.7	1.8		172		0.99			-14.1	
Germany	3.8	Q1	0.9	1.3	7.6	Jun	7.8	2.8	May	5.3		-3.2	1.1		143		0.99			-14.1	
Greece	7.9	Q1	9.7	4.0	12.1	Jun	8.2	12.7	Apr	-5.9		-5.0	3.5		273		0.99			-14.1	
Italy	6.2	Q1	0.5	2.7	8.0	Jun	6.8	8.1	May	0.7		-6.1	3.2		252		0.99			-14.1	
Netherlands	6.7	Q1	1.7	2.4	8.6	Jun	10.4	3.3	May	8.7		-3.4	1.4		163		0.99			-14.1	
Spain	6.3	Q1	0.8	4.0	10.2	Jun	8.2	13.1	May	0.8		-5.7	2.4		199		0.99			-14.1	
Czech Republic	5.1	Q1	3.5	2.2	17.2	Jun	11.9	2.5	May‡	-2.5		-4.8	4.5		276		24.1			-10.0	
Denmark	6.3	Q1	-1.9	2.1	8.2	Jun	6.9	2.5	May	8.2		1.0	1.5		146		7.36			-14.5	
Norway	4.8	Q1	-3.8	3.2	6.3	Jun	4.8	3.2	Apr††	16.4		8.7	1.4		76.0		10.2			-13.9	
Poland	9.4	Q1	10.4	4.5	15.6	Jun	13.5	4.9	Jun§	-2.5		-3.7	6.9		515		4.77			-18.9	
Russia	3.5	Q1	na	-10.0	15.9	Jun	21.2	3.9	May§	10.1		-3.8	9.2		191		60.1			23.2	
Sweden	3.1	Q1	-3.2	1.8	7.3	May	6.9	8.5	May§	3.0		-0.3	1.4		125		10.5			-17.8	
Switzerland	4.4	Q1	1.9	2.4	3.4	Jun	2.5	2.2	Jun	6.3		nil	0.8		102		0.98			-6.1	
Turkey	7.3	Q1	4.9	3.2	78.6	Jun	69.7	10.1	May§	-3.7		-3.9	18.1		148		17.4			-50.5	
Australia	3.3	Q1	3.1	3.0	5.1	Q1	5.0	3.5	Jun	3.1		-3.2	3.4		210		1.47			-8.8	
Hong Kong	-4.0	Q1	-11.4	0.8	1.3	May	3.0	5.1	May††	0.9		-6.7	3.1		198		7.85			-1.0	
India	4.1	Q1	1.9	6.9	7.0	Jun	7.3	7.8	Jun	-1.5		-6.6	7.3		124		79.6			-6.5	
Indonesia	5.0	Q1	na	5.2	4.3	Jun	5.3	5.8	Q1§	0.4		-4.8	7.2		75.0		14,990			-3.5	
Malaysia	5.0	Q1	na	5.0	2.8	May	3.1	3.9	May§	2.5		-6.2	4.0		79.0		4.44			-5.6	
Pakistan	6.2	2022**	na	6.2	21.3	Jun	16.1	6.3	2021	-5.3		-7.1	13.1	†††	320		210			-24.2	
Philippines	8.3	Q1	7.8	7.1	6.1	Jun	4.8	5.7	Q2§	-3.6		-7.7	6.8		288		56.3			-11.2	
Singapore	4.8	Q2	0.1	3.6	5.6	May	5.8	2.2	Q1	18.0		-0.9	2.8		135		1.40			-3.6	
South Korea	3.0	Q1	2.6	2.7	6.0	Jun	4.9	3.0	Jun§	3.1		-2.4	3.3		126		1,307			-12.3	
Taiwan	3.1	Q1	4.3	4.0	3.6	Jun	3.4	3.7	May	14.2		-1.2	1.3		84.0		29.9			-6.3	
Thailand	2.2	Q1	4.7	2.9	7.7	Jun	5.7	1.5	Dec§	0.1		-5.0	2.6		114		36.3			-10.2	
Argentina	6.0	Q1	3.5	4.3	60.7	May	64.1	7.0	Q1§	-0.1		-4.8	na		na		128			-24.8	
Brazil	1.7	Q1	4.0	1.3	11.9	Jun	10.4	9.8	May§††	nil		-6.7	13.3		416		5.38			-3.9	
Chile	7.2	Q1	-3.0	1.5	12.5	Jun	10.7	7.8	May§††	-6.8		-2.8	6.8		225		1,001			-25.5	
Colombia	8.2	Q1	4.0	6.3	9.7	Jun	10.2	10.6	May§	-5.2		-4.8	12.5		554		4,560			-16.1	
Mexico	1.8	Q1	4.1	1.8	8.0	Jun	7.5	3.4	May	-0.8		-3.2	9.1		225		20.7			-3.7	
Peru	3.8	Q1	8.1	2.5	8.8	Jun	7.1	6.3	May§	-3.3		-2.5	8.0		225		3.95			0.2	
Egypt	5.4	Q1	na	5.9	13.1	Jun	12.9	7.2	Q1§	-6.0		-5.9	na		na		18.9			-16.9	
Israel	9.5	Q1	-1.9	5.1	4.1	May	4.3	3.7	May	3.1		-1.3	2.7		156		3.46			-5.2	
Saudi Arabia	3.2	2021	na	7.5	2.2	May	2.5	6.0	Q1	15.4		10.6	na		na		3.75			nil	
South Africa	3.0	Q1	8.0	1.9	6.6	May	6.0	34.5	Q1§	-1.1		-6.1	10.8		181		16.9			-13.5	

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:	
		Jul 13th	Dec 31st 2021
United States S&P 500	3,801.8	-1.1	-20.2
United States NAScomp	11,247.6	-1.0	-28.1
China Shanghai Comp	3,284.3	-2.1	-9.8
China Shenzhen Comp	2,175.6	-1.4	-14.0
Japan Nikkei 225	26,478.8	1.4	-8.0
Japan Topix	1,888.9	1.8	-5.2
Britain FTSE 100	7,156.4	0.7	-3.1
Canada S&P TSX	18,615.2	-0.6	-12.3
Euro area EURO STOXX 50	3,454.0	0.9	-19.6
France CAC 40	6,000.2	1.5	-16.1
Germany DAX*	12,756.3	1.3	-19.7
Italy FTSE/MIB	21,286.3	1.7	-22.2
Netherlands AEX	665.9	1.4	-16.5
Spain IBEX 35	7,944.9	nil	-8.8
Poland WIG	52,440.9	0.6	-24.3
Russia RTS, \$ terms	1,120.3	1.7	-29.8
Switzerland SMI	10,904.9	0.6	-15.3
Turkey BIST	2,408.1	nil	29.6
Australia All Ord.	6,807.8	0.3	-12.5
Hong Kong Hang Seng	20,798.0	-3.7	-11.1
India BSE	53,514.2	-0.4	-8.1
Indonesia IDX	6,641.0	-0.1	0.9
Malaysia KLSE	1,411.3	-0.7	-10.0

	% change on:		
	index	one week	Dec 31st 2021
Pakistan KSE	41,862.8	1.7	-6.1
Singapore STI	3,128.7	0.8	0.2
South Korea KOSPI	2,328.6	1.6	-21.8
Taiwan TWI	14,324.7	2.4	-21.4
Thailand SET	1,546.8	0.3	-6.7
Argentina MERV	102,270.9	7.6	22.5
Brazil BVSP	97,881.2	-0.8	-6.6
Mexico IPC	47,461.4	-0.5	-10.9
Egypt EGX 30	8,764.3	1.1	-26.4
Israel TA-125	1,914.3	1.7	-7.7
Saudi Arabia Tadawul	11,289.8	-1.1	-0.4
South Africa JSE AS	66,142.7	0.6	-10.3
World, dev'd MSCI	2,544.7	-0.6	-21.3
Emerging markets MSCI	970.5	-1.1	-21.2

US corporate bonds, spread over Treasuries

	Basis points	
	latest	Dec 31st 2021
Investment grade	175	120
High-yield	543	332

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

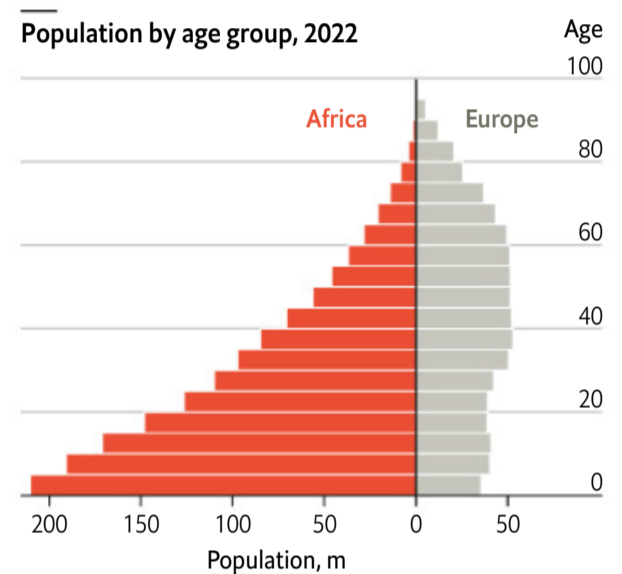
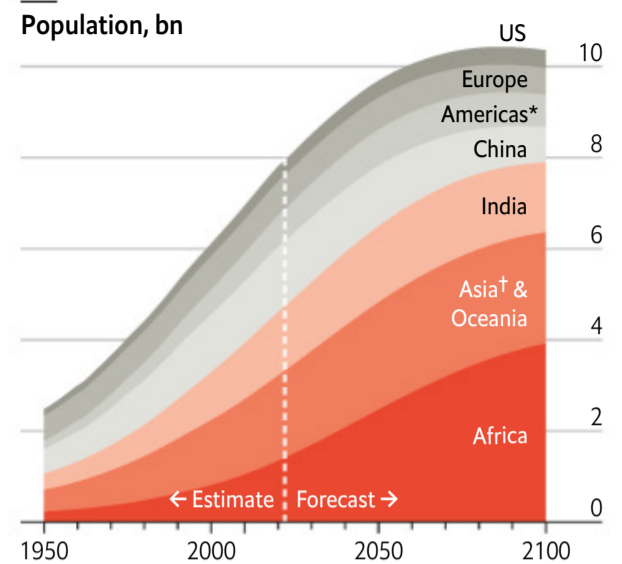
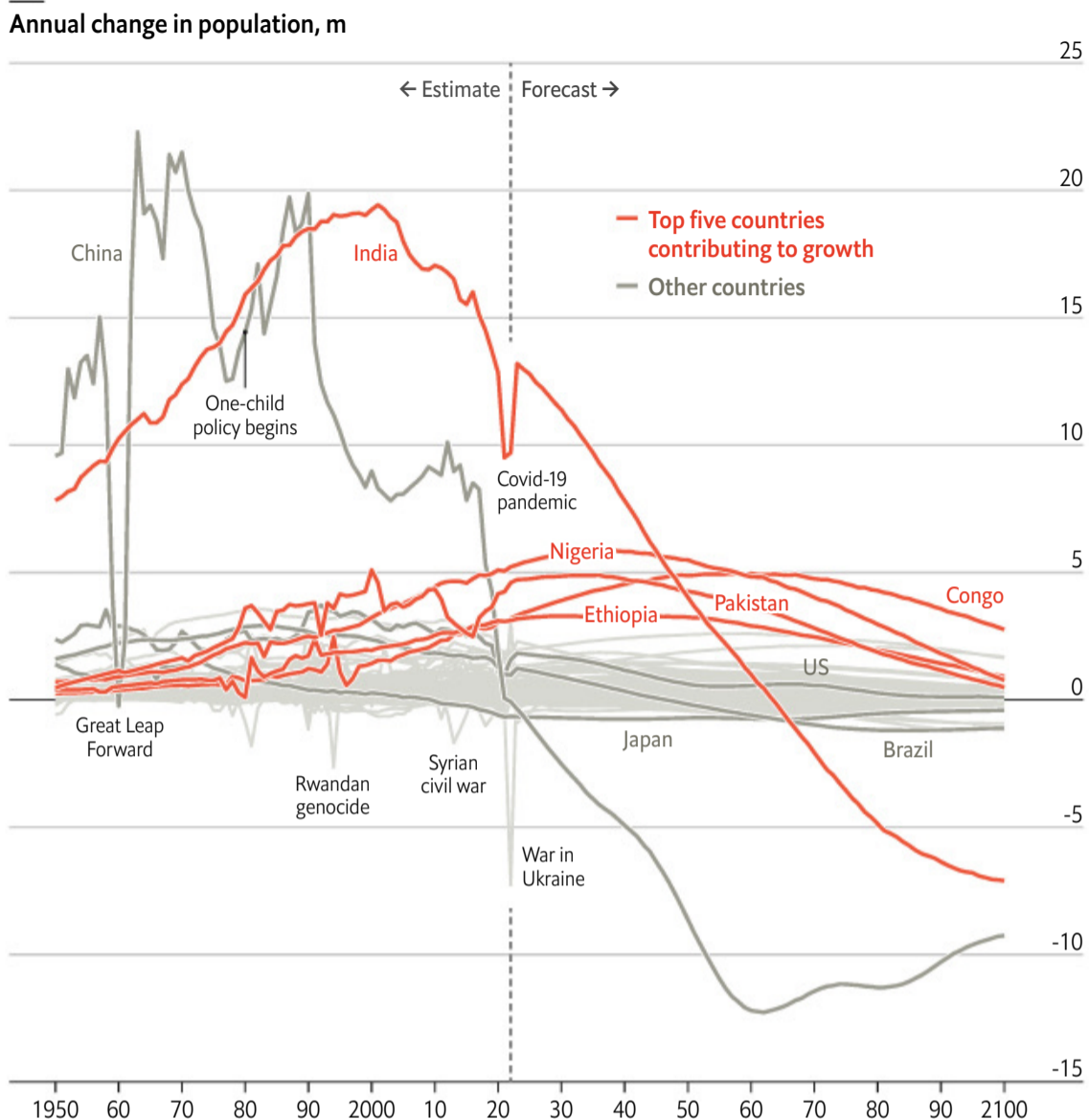
Commodities

The Economist commodity-price index	% change on				
	2015=100	Jul 5th	Jul 12th*	month	year
Dollar Index					
All items	160.4	158.3	-9.3	-14.1	
Food	151.3	153.5	-2.8	17.4	
Industrials					
All	168.8	162.8	-14.3	-30.5	
Non-food agriculturals	163.8	163.4	-5.1	11.4	
Metals	170.2	162.6	-16.7	-37.5	
Sterling Index					
All items	205.4	203.3	-8.4	0.1	
Euro Index					
All items	173.6	174.2	-6.3	0.8	
Gold					
\$ per oz	1,767.9	1,732.4	-4.5	-4.4	
Brent					
\$ per barrel	103.0	99.5	-17.8	30.0	

Sources: Bloomberg; CME Group; Cotlook; Refinitiv Datastream; Fastmarkets; FT; ICCO; ICO; ISO; Live Rice Index; LME; NZ Wool Services; Thompson Lloyd & Ewart; Urner Barry; WSJ. *Provisional.

For more countries and additional data, visit [Economist.com/indicators](https://www.economist.com/indicators)

→ A handful of countries will provide most of the growth in the world's population



*Excluding United States †Excluding China and India Source: UN World Population Prospects, 2022

People watching

The pecking order of the world's population is soon to change

THE WORLD'S population is expected to reach 8bn on November 15th. But, such is the uncertainty with counting every person on the planet, that milestone may already have been reached. India is forecast to surpass China as the world's most populous country in 2023 or soon thereafter.

The UN hedges its predictions even as it makes them. A new forecast published on July 11th says that the world's population will reach 9.7bn in 2050, 800m more than it thought in 2002. By 2100 the world will contain between 8.9bn and 12.4bn people, with a 50/50 chance that its population will be shrinking.

Just a handful of countries are expected to lie behind population growth. The UN forecasts that 43% of the increase between now and 2050 will come from five: the Democratic Republic of Congo, Ethiopia, India, Nigeria and Pakistan. America will

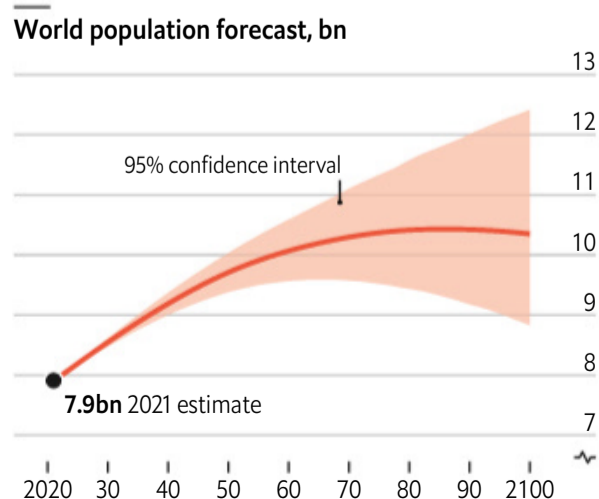
remain the third-largest country in 2050, with 375m inhabitants, after it has added another 40m people. Nigeria will add four times that number and be nearly as big as America. It will displace Indonesia as the fourth-most-populous place.

Some countries are helping the Earth's population to level out. This year 41 countries and territories are expected to lose more people than they gain from births and immigration. Ukraine's population, ravaged by war, will shrink by around 7m. The population of Europe, the world's oldest region, with a median age of 42 years, began shrinking in 2020 after peaking at

747m. By 2050 it is forecast to have 40m fewer inhabitants than it does today.

It is a safer bet that the distribution of humanity across the world will shift dramatically. Europe started on the path to population decline in the 1970s after the number of births per woman fell below 2.1—the level needed to replace people who die. It has since fallen to 1.5. Fertility in Africa, the world's youngest region, is nearly three times Europe's, and it will not fall below replacement rate until 2090. Births in Africa will increase even as the number of births per woman falls. By 2050, 25% of the world's population will be African.

These demographic shifts will have geopolitical consequences. Since 1950 China and India have been responsible for 35% of the world's population growth. But China's population is projected to begin falling as soon as this year. Although the Communist Party now allows women to have three children apiece, they average only 1.2. By 2050 the country will be 8% smaller. Meanwhile, India's population will continue growing, albeit at a gradually slower rate, peaking at 1.7bn in 2064, nearly 50% higher than in China. That will add weight to its claim to play a much greater role in world affairs. ■





Tracking the samurai

Abe Shinzo, Japan's longest-serving prime minister, was assassinated on July 8th, aged 67

SEVERAL YEARS ago, when he was interviewed for *The Economist*, Abe Shinzo was asked whether he saw himself as a Choshu revolutionary. After all, he was from Yamaguchi, the prefecture in south-western Japan that covered the old Choshu domain; his father, once foreign minister, had represented the region, and after 1993 he had held that seat himself. It was the samurai of Choshu who, in the mid-19th century, realised that if Japan did not overhaul its institutions, its army and its economy, it would be swallowed up by the West. They helped both to bring down the weary Tokugawa shogunate and to push through the Meiji Restoration that transformed and modernised Japan.

Did he see himself that way? He liked the question. He was proud of being from Choshu, and of what his forebears had done. Of course, they had wanted to keep foreigners out; but they were also people of wide horizons, who knew that Japan had to catch up, fast. They had risked their lives to achieve it.

His grandfather, Kishi Nobusuke, had carried on the tradition when, as prime minister in 1960, he signed Japan's security pact with the United States. As a small child, sitting on his grandfather's lap, Shinzo had listened to the concerted screams of protest coming from outside. But Kishi believed the pact was necessary for peace and stability, so he faced his opponents down.

A sense of mission ran in the family, as politics did, so that was his natural career. Friends thought him too gentle for it, but his parents had tipped him, not his elder brother, to carry on the family concern. Once there, he found it suited him well. His first administration was a failure, lasting barely a year in 2006-07; but in his second, running from 2012 to 2020, he found his Choshu voice.

It was badly needed. His country was in the grip of severe deflation, with an overhang of old folk and the birth rate falling. Meanwhile, next door, China was on the rise. It was time—past time—to restore the spirit Japan had lost, both in defeat and in its post-war

rush to become an industrial powerhouse. His plan was for a “beautiful” country: strong, moral and an example to the world.

The shock the economy needed was delivered in the style of the *kyodu* archer he was. He raised his bow to send “three arrows” humming towards the target: bold expansion of the money supply, fiscal stimulus and structural reform. The first shot landed well, the second too short, the third nowhere near, hitting long-entrenched labour-market obstacles; but Japan nonetheless recovered its vitality as a growing, job-creating economy. Eventually, his efforts even made him popular.

His main concern, though, was that Japan should assert itself in the world. For too long it had trod nervously, cringing in atonement for its crimes in the second world war, clinging to a constitution written by the American occupiers that required it to be pacifist and to rely for its defences on the United States. This would no longer do. Japan had to be a more equal partner and be prepared, too, to fight alongside allies overseas, like any other country. In the teeth of fierce opposition he therefore increased defence spending and reinterpreted Article 9 of the constitution, the clause that renounced war. He had no wish to wage one, only to lose a shackle on Japan's freedom of action.

Japan, he felt, also needed to retell its history. His opening act in 2006 was to pass a law revising school textbooks to play down atrocities and give the nationalist side. In that view, as in his, his grandfather was a reformer. To the rest of the world, however, he was a war criminal, a builder of Japan's war machine. The Americans, needing him, never tried him, but put him in jail for three years. At school, his grandson was teased by other children over that. He wanted the mockery to stop.

For him, too, the Yasukuni shrine to the war dead in Tokyo was a monument to brave fallen soldiers. To the rest of the world it was polluted with memorials to war criminals, and his appearance there as prime minister, in 2013, caused outrage in China and the Koreans. He wondered why. Surely it was normal for any national leader to pay such respects? He could not accept that Japan's future generations, who had nothing to do with that war, should be destined forever to apologise, as if the world could not move on.

Besides, where apologies were concerned, he felt some were owed to Japan. Childless himself, he fervently took up the cause of parents whose children had been abducted to North Korea to teach Japanese to spies. He particularly took to heart Yokota Megumi, at 13 the youngest abductee, seized as she walked home from badminton practice. In 2002, as part of a delegation headed by Koizumi Junichiro, then prime minister, he brought five abductees back. Megumi was not one of them. But he insisted in Pyongyang that Kim Jong Il, the supreme leader, should publicly apologise to the delegation, which he did; and to the end of his life he wore the small blue badge that held out hope for her and the others.

He could be similarly assertive with other leaders, or he could turn on the charm. The point was to make Japan not only present, but prominent, on the world stage. When Donald Trump was elected he was the first foreign leader to meet him. His visits to Vladimir Putin were frequent and candid, even if he got nowhere in his bid to regain the disputed Northern Territories. After America withdrew from the Trans-Pacific Partnership in 2017, he took charge of it. When he met Xi Jinping, using his visit to end Japan's no-longer-needed “atonement payments” for its brutal invasion of China in the 1930s, he greeted Xi's sour expression with a smile. China might have overtaken Japan in the rankings of economic might; but Japan was the real role model in the region, confident, energetic, not to be swallowed up.

The Meiji Restoration his forebears had championed had slid slowly into violent militarism. His critics saw shades of that in him. He saw only a patriotism and national self-confidence that were long overdue. The line between the two could be hard to draw, and he did not always try. His simplest wish was that Japan should no longer be haunted. He did not believe in ghosts. ■

**ECONOMIST
EDUCATION**

Understand modern geopolitics

**Our six-week online course assesses the
changing balance of power and how it affects
you and your business**

Twenty journalists from *The Economist* and leading global thinkers
have contributed to our course on international relations, including:



—
Michèle Flournoy

Former US under-secretary of
defence for policy



—
Joseph Nye

Distinguished-service professor,
Harvard University



—
Kevin Rudd

Former prime minister of Australia,
now president & CEO, Asia Society



—
Eric Schmidt

Former CEO and executive chairman,
Google

The next start date is **July 20th 2022.**



Book now at
economist.com/execed

Let's unite for Goal of the Century.



We believe that each and every one of us can do our part to make the world a better place.

With our "Goal of the Century" initiative, we are using the power of football to encourage everyone to come together and join hands under one common goal – a united world for sustainability. We need to stand together as one team, Team Century, and aim for the greatest goal ever.

www.hyundai.com/worldcup

BTS, Member of Hyundai Team Century

**Goal of
the Century**

