

The Economist

When Xi meets Biden

Crypto crashes—again

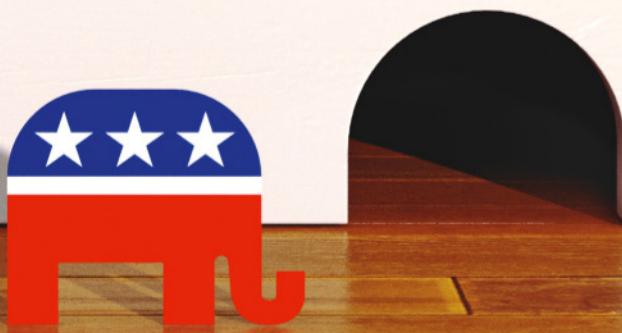
Imagining peace for Ukraine

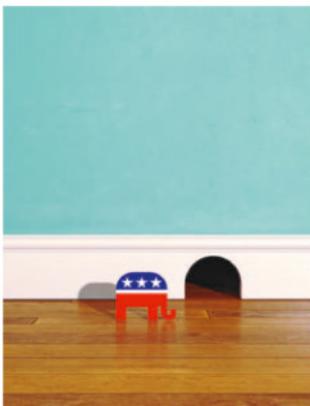
New York's rampaging rats

NOVEMBER 12TH–18TH 2022

THE TRUMP EFFECT

How the midterms diminished the Republican Party





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

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The Democrats fared better than expected in America's **midterm elections**. The Republicans were on course to capture the **House of Representatives**, but with just a small majority. It was not clear which party will control the **Senate**, and may not become so until December, when Georgia holds a run-off. Republicans lost several winnable races after nominating extreme and eccentric candidates favoured by Donald Trump. Joe Biden said it was "a good day...for democracy".

In the **governors' elections**, Brian Kemp, a Republican, beat Stacey Abrams, a Democrat, in Georgia. Ms Abrams had lost in 2018, too. Then, she denied that she had done so; this time, she admitted defeat. In New York Kathy Hochul, a Democrat, held off a late surge by a Republican candidate who accused her of being soft on crime. Democrats also beat back strong challenges in Michigan and Wisconsin. They gained Maryland and Massachusetts, but Arizona and Nevada were too close to call.

Ron DeSantis, a Republican, won re-election as governor of Florida by a whopping margin. He is now well placed to run for the presidency in 2024. Donald Trump warned "Mr DeSanctimonious" to stay out of that race, hinting that he might dish up dirt on him if he challenges Mr Trump for the Republican nomination.

Voters in California, Michigan and Vermont supported changes to their state constitutions to keep abortion legal. A **ballot initiative** in Kentucky to specify that the state constitution does not include a right to

abortion was defeated. However, abortion remains illegal in Kentucky. Voters in Maryland and Missouri voted to legalise marijuana. Similar measures failed in Arkansas and the Dakotas.

A humiliating retreat

Russia ordered its troops to withdraw from **Kherson**, the only Ukrainian provincial capital it controls, and pull back to the far side of the Dnieper river. Russian supply chains were failing as Ukrainians blew up their trucks. Ukraine said it would wait for evidence that Russia really is pulling out. If it recaptures Kherson, a city Vladimir Putin vowed six weeks ago would be part of Russia for ever, its forces will find it easier to attack Russian positions in occupied Crimea.

Ukraine is deploying its first NASAMS and Aspide air-defence systems. These will be used to shoot down Russian missiles and drones, which have been targeting Ukraine's civilian power infrastructure.

Rishi Sunak, Britain's prime minister, faces a winter of discontent. Tax rises and spending cuts are expected. Adding to the gloom, nurses voted to strike. The walkout will affect around half of the country's hospitals, though emergency care will continue.

Sir Gavin Williamson resigned as a minister in the **British government**, after being accused of bullying. Sir Gavin had previously been forced out as defence secretary, in 2019, after leaking information. As education secretary, he introduced a policy to estimate the results of exams pupils did not sit because of covid-19. It was hugely unpopular and swiftly reversed. He was later sacked from that job, too.

Daniel Ortega cemented de facto one-party rule in **Nicaragua**. His ruling Sandinista National Liberation Front won 153 out of 153 municipalities in a sham election, after serious

opposition parties were banned and hundreds of dissidents were locked up. Over 2,000 NGOs and 50 independent media outlets have also been shut down.

Supporters of Jair Bolsonaro, **Brazil's** right-wing populist president, urged the army to intervene after he lost his re-election bid to Luiz Inácio Lula da Silva, a leftist. They claim the poll was rigged, which it wasn't. Police cleared hundreds of pro-Bolsonaro roadblocks, but new ones sprang up. In one state, *bolsonaristas* attacked police who tried to dismantle their barriers. Mr Bolsonaro has not conceded defeat, but does not appear to be blocking the handover of power.

India's Supreme Court overturned the death-penalty convictions of three men for the rape and murder of a 19-year-old woman in 2012, citing sloppiness in the way prosecutors had marshalled evidence. The case had caused national outrage after the victim's body was found burned and mutilated. Women's groups complain that the legal system is inept at investigating such horrors.



In **Pakistan** supporters of Imran Khan, who was ousted as prime minister in April, tried to block the main roads around Islamabad after he claimed without evidence that the current prime minister, Shehbaz Sharif, and other officials were conspiring to assassinate him. Mr Khan was shot in the leg on November 3rd while leading an anti-government march.

Protesters against military rule in **Sudan** clashed with security

forces. The UN estimates that 117 protesters have been killed and some 7,700 injured since a coup last year.

Uganda will shut schools before the end of term in an effort to contain an outbreak of Ebola, a virus that is often lethal if not treated quickly. Authorities have confirmed 136 cases and 53 deaths.

The **UN's** annual summit on climate change got under way in Sharm el-Sheikh, a resort town in Egypt. Delegates flew in to **COP27** to discuss what have been termed as reparations to poor countries for the damage caused by greenhouse-gas emissions from rich ones.

While hosting **COP27** the **Egyptian** authorities kept independent environmentalists well away from the proceedings. Human-rights campaigners put the spotlight on Alaa Abd el-Fattah, an activist who has been refusing water in prison.

As protests continued in **Iran**, the commander of the country's ground forces said that "rioters" would be dealt with if Ayatollah Ali Khamenei, the Islamic Republic's supreme leader, ordered the army to crack down.

Binyamin Netanyahu, whose Likud party won the most seats in the Knesset, **Israel's** parliament, in a recent election set about forming a coalition government. A bloc of extreme right-wingers is intent on joining it. Liberal voices urged centrist parties to keep out the far right by holding their noses and joining Mr Netanyahu in a more moderate coalition.

Welcome...but not you

An ambassador for **Qatar's** football World Cup, which kicks off on November 20th, said homosexuality was "damage in the mind". Visiting fans were reminded that gay sex is illegal in the tiny Gulf state.



Meta laid off 11,000 employees, or 13% of its workforce, amid falling revenues from advertising and e-commerce. The parent company of Facebook, Instagram and WhatsApp is also considering other cost-cutting measures, and suggested it would close offices. In a separate filing it said it expects losses to grow significantly next year at its Reality Labs division, at a time when investors are already frustrated with Meta's focus on creating a metaverse at the expense of the rest of the business. Mark Zuckerberg said he took full responsibility. The company's market value is now around \$270bn, down from \$1trn in September 2021.

The great tech shake-out
Meta was not the only big tech company to announce job cuts. Stripe, an online payments firm, is letting go of 14% of its workforce, and Lyft, a ride-hailing company, of 13%. Amazon has introduced a freeze on hiring for its corporate jobs. Twitter laid off half its staff following Elon Musk's takeover, though it has reportedly asked some of them to come back.

More than 12m people signed up to Disney+ in the three months to October 1st, taking the total number of subscribers to 164m. That is a faster rate of growth in users than at Netflix, though Netflix has 223m subscribers. Operating losses at Disney+ have soared, however, causing Disney's share price to drop by 13%. Following Netflix, it is introducing an ad-supported subscription plan next month to entice consumers and generate new revenue streams.

Apple issued a rare warning about delays to supplies of the **iPhone**. It now expects fewer shipments of iPhone 14 models, and longer waiting times for customers, because of covid-19 restrictions at the factory that assembles the device in Zhengzhou, China. The plant is operated by Foxconn, which has shifted some of the iPhone's production to India, and may transfer more if China becomes an unreliable centre for production.

Advancing its ambitions in the electric-car market, **Foxconn** said it would invest \$170m in **Lordstown Motors**, a startup that is developing an electric-powered pick-up truck at a factory in Ohio.

Renault is rearranging its business around five divisions, including one based on "new mobility, energy and data-based services". The overhaul accelerates the flotation of its electric-vehicle unit, Ampere, next year. Renault also launched a joint venture with Geely, a Chinese carmaker, to make internal-combustion, hybrid and plug-in hybrid engines. The arrival of electric cars has meant that the industry must shift gears "from soccer to pentathlon", said Renault's boss.

In Britain speculation mounted that the government will impose a road tax on **electric vehicles** for the first time when it unveils a budget on November 17th. EVs are currently exempt from the tax, but the government is looking at ways to offset a fall in revenues from fuel duties because of the switch away from petrol to electric.

The global cryptocurrency market was shaken by the looming collapse of **FTX**, one of the biggest exchanges, after a run of customer withdrawals left it facing a liquidity crunch. FTX turned to **Binance**, an arch-rival, for help. Binance at first said it would take over FTX, but then pulled out of the deal, citing reports that FTX had "mishandled customer funds" and was being investigated by the authorities. Cryptocurrency prices plunged. Bitcoin fell to around \$16,000, its lowest level in two years.

Nvidia has developed a new chip that can be exported to China without violating the American government's ban on selling technology in semiconductors to the Chinese. The ban has hit sales of Nvidia's high-end microchips for use in artificial intelligence, data centres and supercomputers.

Covid lockdowns affecting manufacturers and their suppliers lay behind a surprise fall in **China's exports**, which dropped by 0.3% in October, year on year. Imports also declined, marking the first simultaneous contraction in both categories of trade since May 2020, in the heat of the pandemic. China, meanwhile, has become **Russia's** top trading partner, according to the Kiel Institute for the World Economy, after EU sanctions targeted the Russian economy.

Flights of fancy

Ryanair raised its forecast of passenger numbers and said it expected to make an annual profit for the first time since the outbreak of covid. The low-cost airline was in the news recently when its boss, Michael O'Leary, threatened to leave its base in Ireland if the Irish government raises corporate taxes, proclaiming, "We're proud of being Irish, but I wouldn't die in a ditch over it." Ryanair has threatened to quit Ireland in the past. And to pull its business from Britain. And France. And Belgium. In 2018 Mr O'Leary said he would ground flights from Britain to make Britons rethink their decision to leave the EU (he never did).



The Trump effect

Despite the former president's efforts, America and its democracy look stronger after the midterms

SHORTLY BEFORE the midterm elections, Donald Trump held a rally in Ohio. “Our country is becoming third-world,” he told voters. Later he hinted—is threatened a better word?—that he would soon announce he was running for president again. What could possibly go wrong for a party with such a figurehead? Or for one whose primary voters are so keen to relitigate the 2020 election that they chose a slate of candidates in key Senate seats chiefly for being the true keepers of the Trump flame?

Quite a lot, it turns out. The most important result of the 2022 midterms, for America and for the West, is that Mr Trump and his way of doing politics came out of them diminished. This will disappoint all those people, including the autocrats in Beijing and Moscow, who are looking for signs of American decline.

There are no blowout wins in American politics any more. When a party claims that America is theirs, based on how a few thousand votes break in a country of 330m, it is wise to raise an eyebrow and avoid overinterpreting the result. The president’s party nearly always loses seats in the midterms: there have been only three exceptions to this pattern since the civil war ended in 1865. Voters seem to like divided government, which has been the norm in Washington since the 1970s. They punish any party that holds majorities in both chambers of Congress and the presidency, as Barack Obama found in 2010, Mr Trump found in 2018 and therefore Joe Biden’s team must have expected this year. Neither party is currently capable of holding on to a commanding majority of the kind that once allowed them to pursue grand legislative programmes in Washington.

On the Democratic side there are many explanations for this. It is hard to boast about increased federal spending when many voters suspect that Democrats had a hand in raising inflation above 8%. The Democratic Party seems perennially befuddled about what exactly to propose on crime or immigration. Because they are fixated on the weirdness and the threats to democracy posed by many Republicans, Democrats tend to overlook how strange voters think they are. A poll commissioned by Third Way, a centrist Democratic think-tank, shortly before the election found that voters question whether the party’s candidates share basic American attitudes towards patriotism and hard work. When asked which party is more extreme, the average voter replies that Democrats are.

That ought to have been a gift to Republicans in a midterm year. Yet the party doesn’t have any better ideas on how to tackle America’s problems, and has quite a few for making them worse. Elected Republicans let the country down by trying to wriggle out of rejecting Mr Trump’s claims about the 2020 election. By doing so they also robbed their party of a chance to rethink and rebuild itself after its defeat, which is what parties normally do. Mr Trump is still nominally the chief Republican. He has an iron grip on the party’s berserker faction. Yet after this week’s vote, he looks more vulnerable than at any time since January 6th 2021, when many Americans thought this time he had gone too far.

That presents an opportunity. Mr Trump can profit from breaking things. Many voters want a fighter, and refusing to con-

cede and inciting a riot is proof of pugilism. After this week’s vote the suspicion that Mr Trump is, in fact, just a loser will be much harder for him to overcome. And that is what his record points to. In 2020 he was the first incumbent since Jimmy Carter to follow a president from the other party and then lose. In 2018 the Republicans lost 41 seats in the House under the Trump banner (Democrats may have lost only a handful this week). Even at his moment of greatest triumph, in 2016, he lost the popular vote and only narrowly beat a candidate who was trying to follow a two-term president from her own party, something which rarely happens. Now 2022 can be added to this less-than-stellar streak.

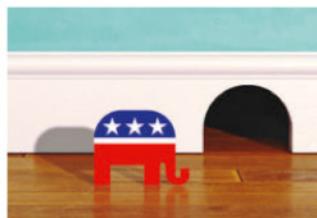
His handpicked candidates turned winnable Senate races into nail-biters in Arizona, Georgia, Nevada and Pennsylvania. Meanwhile in Florida, Governor Ron DeSantis, a probable rival, won by roughly 20 points. Two Republican candidates for governor closely associated with Trumpism—Doug Mastriano in Pennsylvania and Tim Michels in Wisconsin—both repeated the lost-cause story about 2020 and vowed to use their influence over election administration to make sure no Republican presidential candidate would lose again in their state. It was they who lost. In Michigan and Nevada Republican candidates who swore the 2020 election was stolen ran for secretary of state so that they might oversee the next one. They lost, too. In Colorado Lauren Boebert, who has flirted with the QAnon conspiracy, may lose the safest of seats.

It turns out that common sense can still sometimes beat partisan reflexes after all. At the margin voters distinguish between good and bad candidates, which matters when the margins are thin. American democracy seems healthier and more secure as a result.

Where does this leave the country? Alas, for the next two years Congress is likely to become mired in theatrical showdowns over funding the government and pointless investigations into the business dealings of Hunter Biden, the president’s son. America’s real problems will go unanswered.

Given that sterile prospect, it is in America’s and the Republican Party’s interest to move on from Mr Trump and look forward. But perhaps surprisingly, given that he has just presided over a creditable midterm performance, there are also doubts whether Mr Biden should be the Democratic nominee in 2024 (see Lexington). His administration has, like any presidency, got plenty of things wrong. But by arming Ukraine and putting policies in place to drastically reduce carbon emissions, it has got two important things right. Now, also for the good of party and country, Mr Biden might rethink what he does next.

Walking away from power is a noble American tradition that is almost as old as the republic. By following it, Mr Biden could deny Mr Trump the 2020 rematch he so clearly craves. Republicans in Congress might be a bit less obsessed with blocking anything that could look like a presidential win. And Democrats might make rebuilding democracy more than a self-serving talking point. With his achievements and his party’s relative success in these elections Mr Biden has an opportunity to depart on his own terms. He should use it. ■



War in Ukraine

Dreams of peace

How a stable and successful country could emerge from the trauma of Russia's invasion

IMAGINE A VICTORIOUS Ukraine in 2030. It is a democratic nation, preparing to join the European Union. Reconstruction is almost complete. The economy is growing fast; it is clean and diverse enough to keep corrupt oligarchs at bay. All this is underpinned by stout Ukrainian security. Defence against another invasion does not depend on the Kremlin's goodwill, but on the sense that renewed Russian aggression would never succeed.

Today, as Russia's tattered army appears to retreat from Kherson in the south, an end to the fighting still seems far off (see Europe section). But news that Ukraine and its backers are starting to outline their views of the future makes sense, because the coming months will determine what is possible at the decade's end. It means thinking about how to rebuild post-war Ukraine, and the security guarantees needed to deter future invaders.

In the past, Western leaders have wisely insisted that Ukraine should determine its own objectives. Ukrainians are dying in a conflict all about the right of sovereign countries to decide their own future. If peace is foisted on them, it is less likely to last. However, Ukraine's Western backers have interests at stake, too. If the war escalates, they could be sucked in. If Russia ends up denying Ukraine victory, by creating a failing state on its western borders, Vladimir Putin or his successors would threaten the security of the entire Atlantic alliance.

Ukraine also has reasons to share its plans for the future with NATO. At present the West rations arms and money partly to steer the war, accelerating the supply of advanced weaponry if Ukraine appears to be struggling, but refusing aircraft and the longest-range munitions for fear that it will press on too far—whatever that means. Ukraine should be more of a partner and less of a supplicant. Another reason for Ukraine to work together with its allies is to bind them in, especially in America. Nothing can guarantee the support of the next president (Donald Trump is not a fan, for example). But a successful, settled plan for the war and its aftermath is the best available assurance of continued backing.

Such a plan must include a framework for reconstruction. The Ukrainian people need to restore their shattered lives. More than that, if Ukraine's economy fails, so will its democracy.

Donors at a meeting in Berlin in October tried to sketch out a plan for rebuilding Ukraine and to estimate its costs (see International section). Patching the country up while the fighting continues, which could last another three years, will cost tens of billions of dollars, they reckoned. Initial reconstruction, lasting a further two years, might cost \$100bn. A third phase—in effect, a Marshall Plan for Ukraine, probably costing even more—would seek to create an economy that is fit to join the EU.

Clearly, such plans require vast amounts of capital from private-sector investors. A few dozen governments and multilateral lenders will be involved in laying the groundwork to attract outside money. If their grants and loans are pilfered by oligarchs, the country will fail. Hence Ukraine and its backers must harness the national purpose forged in war to give anti-corruption groups the clout to police how the money is spent.

If Ukraine is to thrive, it also needs security. To be viable, Ukraine needs to keep its access to the Black Sea. Many people focus on how much land Ukraine recaptures; Mr Putin needs to suffer a decisive defeat so that his failure is unambiguous. Beyond that, though, Ukraine's victory will rest as much on the health of its democracy as on the extent of its territory.

When the fighting does stop, Russia will continue to re-arm rapidly. The government in Kyiv will therefore need Western security guarantees that are more robust than those that spectacularly failed to deter Mr Putin in 2014 and, again, earlier this year. NATO membership would be the gold standard, under which a Russian attack on Ukraine would count as aggression against the entire alliance. But America and many of its allies are unwilling to court direct conflict with Russia. And Turkey, which is still delaying membership for Sweden and Finland, may resist.

A more plausible alternative, put forward in September by a Ukrainian official and a former NATO secretary-general, is modelled on America's relations with Israel. The Kyiv Security Compact foresees a web of legally and politically binding commitments between Ukraine and its allies. Some countries will pledge military, financial and intelligence support if Russia attacks; others will commit to sanctions. The plan also calls for investment in weapons transfers and in Ukraine's defence industry to be sustained over decades.

Be under no illusion how hard this compact will be to bring about. One worry is the state of the Western arms industry, which was run down after the collapse of the Soviet Union. It may struggle to sustain the supply of weapons and ammunition to Ukraine while the fighting continues, let alone outpace Russia as it rearms when the war is over. Work on bolstering weapons production should begin right away, by creating a pipeline of orders and rationalising procurement.

The other worry is that the West may not have staying power (see Briefing). Polling of Republicans in America and voters in eastern Germany, and anti-war protests in Rome and Prague, suggest that support for Ukraine cannot be taken for granted. Governments everywhere have limited supplies of money and attention. America has other business, such as with China in the Pacific (see Leader). After decades of contracting out its security to the United States, Europe has barely begun to reckon with the extra responsibilities it must take on.

The West needs to see that spending many billions of dollars in Ukraine is not an act of charity, but of self-preservation. In recent decades, Russia has started a war on its borders every few years. Mr Putin sees today's conflict as a clash of civilisations between Russia and the West. Half-hearted Western support of Ukraine will not appease him; nor will it lead to the rebuilding of relations with Russia, as some Europeans hope. On the contrary, it will convince him that the West is decadent and vulnerable. If Mr Putin creates a failed state in Ukraine, NATO members will be the next targets of his aggression. Ukraine's dream of victory would ensure lasting peace for its 43m inhabitants. It would also ensure peace for countless more people across Europe. ■



America and China

Great powers must talk

Refusing to speak is what children do when they are angry

THE LAWS of thermodynamics will soon be tested in Bali. The Indonesian island will host leaders from the G20 on November 15th and 16th. In its tropical heat, an icy conversation may take place: President Joe Biden may meet his Chinese counterpart, Xi Jinping, in person for the first time since taking office. Because America and China barely speak, this matters. Might blarney in Bali lead to a thaw between the superpowers?

Don't count on it. Mr Biden's team sees America as locked in competition with an over-aggressive China. Mr Xi is bent on reshaping the world order to make it more amenable to autocrats. He believes America is declining and seeking to block China's rise. Crises between them loom on several fronts, with dark parallels to the cold war (see China section). Dialogue was often limited back then, too. But the lesson from that period is that rival powers must find ways to communicate—particularly when tensions are high.

Mr Biden seems keen enough. His approach to China has been unceasingly tough. He has curbed Chinese access to advanced computing with a sweeping set of export controls, and pledged to defend Taiwan, the self-governing island which China claims. Now, though, White House officials want to "find a floor" in the relationship by focusing on areas of mutual concern such as climate change, food security and illicit drugs.

Republicans could make any progress difficult. If they regain control of the House of Representatives after the votes have been counted in the midterm elections, they will have more power to initiate investigations and to pass measures that might provoke China and put pressure on Mr Biden to remain tough. The probable new Speaker of the House, Kevin McCarthy, has suggested that he would visit Taiwan if he takes up the post. When Nancy Pelosi, the current Speaker, made such a trip earlier this year,

China responded by holding massive military drills around the island and cutting off all high-level dialogue with America.

Domestic politics in China presents its own challenges. Mr Xi has consolidated power like no Chinese leader since Mao Zedong. That should give him leeway to work with Mr Biden. Instead he has stoked anti-American fear and loathing at home. Chinese officials demand concessions on Taiwan and on technology exports before they will even discuss climate change or controlling narcotics. Mr Xi is bracing for confrontation, telling leaders at last month's Communist Party congress to prepare for "high winds, choppy waters and even dangerous storms".

Mr Xi's power and his "zero-covid" policy, which keeps China

closed off from the world (see Finance & economics section), have limited channels of communication. Most Chinese officials have no influence on their boss, leaving America with few interlocutors. Indeed, Chinese diplomats seem to think their main task is to berate American officials. The men surrounding Mr Xi, chosen mostly for their loyalty, are unlikely to advocate a change in direction. Officials in Beijing sometimes flip this gloomy observation on its head, noting that no promise Mr Biden makes will necessarily bind his successor.

Things looked similarly bleak in the 1960s, when America faced down a Soviet attempt to place nuclear missiles in Cuba. Years passed before top leaders met. In 1967 President Lyndon Johnson and Alexei Kosygin, the Soviet premier, held friendly (if unproductive) talks. It would be years more before hostility subsided into detente. Simply talking will not make America and China friends, either. But it reduces the risk of miscalculation, which is no small thing when both powers are nuclear-armed economic giants. It also holds out hope that relations will one day be more stable, perhaps even constructive. ■



Israel

Back Bibi. Seriously

To keep out the far right, Israel's centrists should join a coalition with Binyamin Netanyahu

ISRAEL, MORE than most other Western democracies, demands extraordinary sacrifice from its citizens. Its army, which conscripts most Jewish-Israeli men and women and whose values permeate society, requires soldiers to run towards danger. Its officers are taught to lead from the front, no matter the personal risk. Now some of that same spirit may be required of centrist members of the Knesset, Israel's parliament, in defence of the country's liberal democracy (see Middle East & Africa section).

Yair Lapid, the outgoing prime minister, and Benny Gantz, his defence minister, fought five elections in four years to remove Binyamin Netanyahu and then keep him out of the prime minister's office. Now, after 17 months in opposition, Mr Netanyahu is on his way back, having won a parliamentary majority by

pandering to a vile assortment of Jewish supremacists, homophobes and far-right religious zealots gathered under the umbrella of the Religious Zionism bloc. If he embraces them in a coalition government, as he said he would while campaigning for the election on November 1st, he could undermine Israel's democracy and grievously wound its judicial independence. To prevent this, centrists may have to do the unthinkable, and enter government with Mr Netanyahu in order to keep them out.

It is no small thing to ask centrists such as Mr Lapid, whose party came second, to link up with Mr Netanyahu, a street-fighting politician who has often left his coalition partners feeling bruised and degraded, and who trampled democratic norms during his 15 years in office. Many Israelis who voted for the par-►

ties of centre and left would see it as a betrayal of trust and principle if their leaders were, after all, to join a government led by Bibi, as Mr Netanyahu is widely known.

Israelis are proud of living in a country under the rule of law, albeit that Arabs in Israel proper and those in the Israeli-occupied territories tend not to share that feeling. Jewish Israelis believe that no fellow citizen is above the law. They note with satisfaction that a former prime minister and a former president were sent to prison—one for corruption, another for sex crimes. Past Israeli prime ministers have resigned promptly when accused of financial impropriety. Mr Netanyahu, who is on trial facing charges of bribery and fraud, has refused to do so.

More strikingly, Mr Netanyahu seems willing to shatter the taboo long upheld by Israel's main parties, including his own Likud, that has prevented them from entering into governing coalitions with parties of the far right which patently deride the basic tenets of a liberal democracy. His electoral alliance with the Religious Zionism bloc breaks that mould, since it includes the Jewish Power party led by Itamar Ben-Gvir, a rabid racist who has been known to admire Meir Kahane, a Jewish supremacist who exulted in violence against Arabs and was jailed for terrorism. Mr Ben-Gvir is ferociously hostile to Arabs and suggests that those who have Israeli citizenship—about a fifth of the total population—should be expelled from the country if they are deemed "disloyal". Mr Ben-Gvir also wants to be the minister in charge of the police, who have investigated him several times for inciting violence.



The bloc's other co-leader, Bezalel Smotrich, is a homophobe who wants to segregate Arabs from Jews within Israel. He plans to curb the courts' power to strike down legislation that contravenes Israel's Basic Laws, which protect human rights—to ensure, for instance, that Jewish settlements on the West Bank can be made legal. He also wants to scrap from the statutes the crime of "breach of trust" that Mr Netanyahu has been charged with. A far-right coalition would also need the backing of the ultra-Orthodox parties, which want a weaker Supreme Court.

Yet there is still a slender chance that Mr Netanyahu could be dissuaded from forming a government with such horrible allies. Under Israel's system of extreme proportional representation, elections are invariably followed by horse-trading. Israel's president, Isaac Herzog, a decent man of the old centre-left, will have to offer Mr Netanyahu, whose party won the most seats in the election, the first shot at forming a government. But he is also likely to urge him to ditch the extremists and instead make a coalition deal with the parties of the centre who have been in government for the past year and a half.

Messrs Lapid and Gantz have both ruled out going into a coalition government with Mr Netanyahu, whom they detest and want to see behind bars. Both would find it hard to break their word. They should take a deep, patriotic breath. To defend the principles they stand for—liberalism, democracy and the rule of law—they should do whatever it takes to keep out those who would junk them. For his part, if he has a shred of honour, Mr Netanyahu should turn his back on the worst of Israelis. ■

Britain's economy

How to fix a budget in 55 days

Controlling pensions spending and taxing property are the best ways for Britain to balance the books

ON NOVEMBER 17TH Jeremy Hunt, Britain's chancellor, will unveil the most austere tax-and-spending measures since 2010. The tightening could be worth nearly £55bn per year (\$62bn, 2.5% of GDP)—or about a billion pounds for each day since Liz Truss's disastrous government lost the confidence of financial markets by promising huge unfunded tax cuts (see Britain section). To regain credibility, Britain must now ensure that its debt-to-GDP ratio starts falling within five years.

Where the axe falls matters. Britain is fragile. After recent rises in energy prices, real wages are barely higher than they were in 2007. For years the economy's growth rate has been dismal, a problem made worse by Brexit, which is chipping away at productivity. In the other G7 economies, public and private investment is forecast to add up to 22–26% of GDP in 2022; in Britain the figure is just 17%.

Taxes as a share of GDP are at their highest in nearly four decades. But this is because an ageing population has pushed up spending and slowed growth, not because public services are lavish. In fact, after the sharp cuts of the 2010s, many are in a dreadful state (see *Baghot*). The Conservatives have already pared back welfare spending in real terms; many poor households are acutely vulnerable to high energy and food prices.

Mr Hunt needs quick fixes, in other words, but he has precious few available. Containing spending on public services,

especially health care, requires thoughtful and deep-rooted reform that reduces costs and encourages innovation. It cannot be done in a hurry. Cuts to capital spending would harm long-term growth. And the higher taxes rise, the more important it is that the tax system is calibrated to minimise damage to the economy. Throttling spending and raising taxes across the board would be counterproductive. Instead, Mr Hunt should be highly selective about how he plugs the hole in the budget.

Take spending cuts as an example. Only one part of the welfare state grew substantially more generous during the 2010s: the state pension. It is protected by a "triple lock" formula, whereby it rises each year by the highest of average earnings growth, consumer-price inflation or the arbitrary figure of 2.5%. As a result, it has grown by 8% in real terms since 2010, even as working-age welfare shrank and wages stagnated. It is a near-universal benefit, so many retired households with substantial private income and wealth benefit from this generous uprating.

On its current trajectory the state pension bill, as a share of GDP, will grow by 29% by the middle of the century. The triple lock was suspended in 2021, because of the pandemic. It should be permanently scrapped and replaced with a rule ensuring that spending on the state pension, as a share of GDP, does not grow. That would both free up money and give coddled pensioners a stake in promoting economic growth. ►

▶ Replacing the triple lock will eventually save a huge amount of money but it will take time, especially because the poorest pensioners need to be protected during the energy crisis. Big tax rises are therefore inevitable. There are few good options, but one leaps out: taxing the priciest properties more heavily.

Property levies are among the most friendly to economic growth. Yet Britain's main tax on homes is still based on relative property valuations from 1991 and is regressive. House prices in the London borough of Kensington and Chelsea are eight times the national average, but even the most expensive homes there incur annual "council tax" of just £2,700, less than double the national average. A higher inheritance-tax threshold for housing wealth—probably Britain's stupidest tax policy—encourages the elderly to remain in family-sized homes in order to pass them on in their wills tax-free.

The present system is so broken that an annual tax of around 0.5% on current property values could replace all the government's existing property levies while giving most people a tax cut, and still raise more money. The extra inheritance-tax exemption for property should also be scrapped, and loopholes in

the inheritance and capital-gains tax systems ought to be closed.

Yet the fiscal hole is so large that even this would not be enough. Mr Hunt will also need to raise income, payroll or consumption taxes. He should choose income tax. It is fairer than national insurance—a payroll tax that does not apply to pensions—because taxes should reflect means, not age. And unlike VAT, a consumption tax, it will not boost near-term inflation. Freezing the amount workers can earn before tax (an exemption that, oddly, most benefits higher earners) is also wise.

Lamentably, the chances of Mr Hunt making the right choices are slim. Pensioners and owners of expensive houses tend to vote Tory. Thoughtless spending cuts are likely. So are tax gimmicks, such as restrictions on the amount workers can save for retirement with taxes deferred—a policy that raises money today at the cost of future revenues. Britain's tax-and-spending system is full of such piecemeal distortions. If the welfare state is to work in the years ahead, the economy will need less shortsighted fiddling, more considered reform of age-related spending and a growth-friendly approach to tax. Little that Mr Hunt does will be popular. He could at least get the economics right. ■

Carbon and the economy

Debunking degrowth

The link between economic growth and rising emissions has been broken. Now this decoupling must speed up

GOODY NEWS on the fight against climate change can be hard to find. Targets are missed, promises are broken and the planet gets hotter. But as worthies from across the world meet in Sharm el-Sheikh for the latest UN conference to pledge to do more to tackle this enormous problem, there is at least one reason for optimism. A large and growing group of mostly rich countries has severed the link between economic growth and rising emissions of greenhouse gases.

For the three centuries or so since the fossil-fuel age began in earnest, living standards and emissions have risen hand in hand. Coal, then oil and natural gas, all brought prosperity while also raising global temperatures. This link has led some environmentalists and scientists to argue that only a programme of "degrowth"—reducing the pace of improvements in overall prosperity, or reversing them altogether—would avoid the worst effects of climate change.

Yet over the past decade a growing number of countries—33 by *The Economist*'s count, home to over 1bn people—have managed to increase their GDP while reducing their emissions (see Finance & economics section). After a peak in 2007 America reduced its territorial emissions from 6.13bn tonnes of carbon-dioxide equivalent to 5.26bn before the pandemic. And that is not because Americans are simply importing their toys and electronics from dirtier places. Strikingly, consumption emissions, which include a measure of the carbon embedded in imports, have fallen by 15% over the same period.

Decoupling is largely a result of two big shifts. One is the changing structure of economies. As countries became richer they expanded their service sectors, which use less energy than manufacturing. In Britain, the birthplace of the Industrial Revolution, four-fifths of output is now generated by accountants,

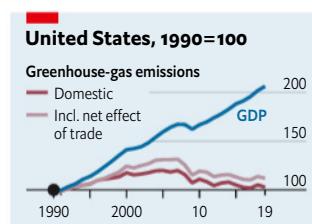
shop assistants and other service workers. Even in Germany, famed for its industrial prowess, manufacturing's share of GDP is falling. That has reduced the energy intensity of growth.

Second, imports are getting greener. In the decade after the financial crisis, China's export sector decarbonised faster than the rest of its economy. This has helped reduce the total carbon footprint of rich countries. Furthermore, manufacturing is shifting out of China, which is more polluting, per dollar of GDP, than India or Indonesia.

This decoupling is unambiguously good news. But, with the link unbroken in many poorer countries, it has not been enough to reduce the pace of increase in global emissions. The task is therefore to speed up decoupling. That will not only demonstrate that tackling climate change and improving living standards can go together; it will also allow poorer parts of the world to use more of the remaining global carbon budget to get richer.

Hearteningly, there are reasons to think such an acceleration is possible. So far, decoupling has been achieved largely by reducing the energy needed per unit of output. But there are big gains to be had from making energy greener in the first place. Thanks to investment in renewables and greater electrification, such gains could soon be realised. That might even boost long-term growth: an economy that must scrimp and save to conserve energy is less dynamic than one in which power is green, abundant and cheap.

Some environmentalists may fret that celebrating such good news can have a perverse effect, by breeding complacency or making fighting climate change seem less urgent. In fact, the lack of a trade-off between improving living standards and tackling climate change should be a reason to go faster still. It means one less excuse for timidity in Sharm el-Sheikh. ■



Environmental issues

The suggestion that we can reach net-zero greenhouse-gas emissions by promoting energy-supply technologies is not in line with the findings of the latest reports from the Intergovernmental Panel on Climate Change (Special report on the world economy, October 8th). If we do not tackle energy demand we will see a huge surge in batteries, solar panels and electrolyzers. To give an example, replacing all internal combustion vehicles with electric ones would lead to considerably expanded mining and resource-extraction activities, causing environmental harm and affecting vulnerable communities.

Innovation tends to benefit developed countries more than poor ones. Moreover, a quarter of global emissions are caused by our food systems and use of land. Just dealing with energy supply would leave those emissions largely untouched and will not get us to net zero.

IPCC reports have emphasised that the transformation of systems is needed to tackle mitigation and adaptation challenges fairly and sustainably. Technological innovation and stronger policy instruments backed by political certainty have a role to play, as you say, but we also need to change people's behaviour and the financial system, expand human-capacity development and enhance international co-operation.

Climate change is more than energy alone, and we cannot simply innovate our way out of it.

PROFESSOR HELEEN DE CONINCK

Contributor to the 2018 IPCC special report and the 2022 IPCC Sixth Assessment Report
Eindhoven University of Technology

You rightly noted India's commitment to achieve net-zero emissions ("Skunk no more", October 22nd). But generating green energy is only one part. Reducing wasteful consumption is equally important, and

has not been dealt with seriously in India. Agriculture remains the largest emitter, using large amounts of energy for extracting groundwater for irrigation. The groundwater levels are plummeting and need ever-more energy to draw water up to the fields.

S.K. KUMAR
Chairman
Indian Water Resources Society
Meerut, India

I enjoyed your look "Inside the gigafactory" (October 29th). A big question is whether to reuse or to repurpose batteries before recycling. All batteries lose their ability to hold a charge over time, as any mobile-phone user can attest. This can be a significant issue in a vehicle, where the energy a battery can retain reaches a point where it is disproportionality used on moving the mass of the battery rather than passengers or cargo. But that is not necessarily the end of its useful life.

Batteries can do more at this point. Most retired vehicle batteries retain a significant amount of their capacity, often around 80%, so they can be repurposed into static operations such as emergency power storage or similar. The Johan Cruyff Arena in Amsterdam does exactly this. Extending the useful life of any manufactured item significantly reduces its lifetime environmental impact.

LEE GRIFFIN
Associate professor
WMG (Warwick
Manufacturing Group)
University of Warwick

Unaffordable v affordable

Why is the word "scary" used regarding the prospect of falling house prices ("House-price horror show", October 22nd)? The worst forecasts merely put a dent in the unbelievable increases of the past decade. In Australia it has been common for prices to double over five years. Yet the prospect of a decline of, say, 20% is viewed as the end of the world. Did anyone really expect this

price surge to be sustainable? The lucky ones are those who cashed in. For the others a ridiculous gain will be reduced to a handsome one.

DAVID GREATOREX
Sydney

A quick curse in English

Regarding the "fading genre" of the language phrasebook ("How long have you had that goitre?", October 29th), "English As She Is Spoke" is a Portuguese-English phrasebook written by Pedro Carolino, originally published in 1855. It is hilariously bad. Though he knew no English, Carolino was resourceful. He knew some French and translated from a French-English dictionary.

The result is a phrasebook like no other. It contains such useful conversational points as "Where correspond the bells?" and "All trees have very deal bear". It memorably includes the hedgehog and the wolf in a list of fish and shellfishes. The book enables the user to converse about civility ("It must never to laugh of the unhappy"), flirtation ("Listen'to, como hither"), and disaster at sea ("Never have you not done wreck?"). One could argue it even anticipates the Beatles ("Lace me do"). Mark Twain commented that "Nobody can add to the absurdity of this book, nobody can imitate it successfully, nobody can hope to produce its fellow; it is perfect."

Perhaps this old chestnut was an infamous fraud rather than a proper phrasebook. But as Carolino himself wrote: "If can't to please at every one's." BAILEY HOWARD
Tallahassee, Florida

My husband is tight-lipped about his tours in Afghanistan and Iraq, and I've found the best way to understand his day-to-day experience is the addendums he makes to army-issued phrase books. It starts with learning pleasantries and chit-chat ("do you have children?"), as well as some basic military questions ("do you have weapons?"). Soon afterwards there are sections on

profanities and sex, the sharing of cigarettes, and descriptions of being bored, carrying too much weight, and a dislike of the rain and mud.

At one point he learns how to say, "I need to check on my lazy soldiers". Towards the end of the book, different handwriting appears, describing idioms like "my moustache is annoying me".

It all feels rather cosy, until every now and again one is brought up short by sections on bombs, and questions on "how many are wounded or killed?" As you said, phrasebooks can be very revealing.

SIAN DAVIES
London

My "A Guide-book to Albanian" from 1983 includes the greeting "Dear Comrade", and "Let's drink this toast to your leader, Comrade Enver Hoxha and to our Marxist-Leninist Parties." The parting salutation is "I hope to find you even better next time, even stronger, with even more advanced industry, with your agriculture still more modernised and mechanised." These remain universal aspirations, not lost in translation.

CHRIS WHEAL
London

Monty Python had a unique slant on phrasebooks, with a priceless sketch. John Cleese plays a Hungarian man trying to buy cigarettes. Reading from the book he says to the sales clerk, played by Terry Jones: "My hovercraft is full of eels."

NIGEL BRACHI
Edmonton, Canada

Oh, the pleasures of translation. In the early 1960s, Gordonstoun School's standard German phrasebook included the essential "where is the carriage for my servant?" CHRIS MUNRO MAY
London



Finding an ending

WASHINGTON, DC

On what terms could the fighting stop?

RUSSIA'S LIGHTNING attack on Ukraine's capital, Kyiv, was a failure. Its creeping artillery war to seize the eastern region of Donbas has ground to a bloody halt. It has lost a chunk of stolen territory south of the city of Kharkiv, and this week announced a retreat from Kherson, the only provincial capital it had captured since its invasion in February. With each setback, Vladimir Putin, Russia's president, has sought new ways to torment Ukraine. The latest is a relentless bombardment that seeks to wreck Ukraine's infrastructure. Residents of the capital have been told they may have to evacuate if the power grid collapses, halting water and sewage services.

Power cuts have not sapped Ukraine's will to fight. But they are a reminder that, eight months after his unprovoked invasion, Mr Putin keeps looking for ways to raise the stakes. Some worry he might blow up a dam on the Dnieper river, as Stalin did in 1941, to slow his adversaries' advance.

The ever-evolving Russian assault also raises an awkward question: how long will America and Europe keep providing Ukraine with the billions of dollars' worth of

military and economic aid it needs every month to fend Russia off? "For as long as it takes," say Western leaders. But many of their citizens reject the idea of bankrolling an indefinite conflict with Russia. Tens of thousands of people took to the streets of Rome on November 5th, calling for an end to the fighting. "We don't want war. No weapons, no sanctions. Where is diplomacy?" read one placard.

Wary Washington

In America, too, questions have been raised. Hard-left Democrats recently issued a call, swiftly retracted, for negotiations. Gains by America-first Republicans in the midterm elections on November 8th, although smaller than expected, are a reminder that American politics might change dramatically after the next presidential election, in two years' time, and with it policy on Ukraine.

Jake Sullivan, Mr Biden's national-security adviser, made an unannounced trip to Kyiv on November 4th to promise "unwavering" support. But he also urged Ukraine to think about future peace terms.

It has since emerged that he has been in touch with his Russian counterparts, to warn them not to use nuclear weapons. On November 9th Mr Biden said Russia and Ukraine would "lick their wounds" after the battle for Kherson, and might then be ready for compromise. He insisted he would not tell Ukraine what to do.

In private, Western and Ukrainian officials are starting to ponder what a stable outcome might look like. Will Ukraine become a new Finland, forced to cede land to its invaders and to remain neutral for decades? Or another West Germany, with its national territory partitioned by war and its democratic half absorbed into NATO? A much-discussed template is Israel, a country under constant threat that has been able to defend itself without formal alliances but with extensive military help from America.

The precise terms of any negotiated settlement depend on what happens on the battlefield. There is likely to be a lot more fighting before either side is ready to end the war. Russia and Ukraine have each lost, by one estimate, roughly 100,000 soldiers, killed and wounded, but both still hope to manoeuvre to a more favourable position.

The retreat from Kherson is a humiliation for Mr Putin (see Europe section). But it will give Russian forces a more easily defended line along the Dnieper river. Mr Putin shows no sign of throwing in the towel. He has mobilised hundreds of thousands more recruits. Some have been rushed into battle with little training or equipment to ➤

hold the line; the rest may be used for a renewed push next year.

Ukraine, for its part, hopes to maintain its momentum. Its army is getting reinforcements this winter, in the form of thousands of recruits trained by Britain and other Western countries. Western arms continue to arrive. On November 4th the Pentagon announced another arms package, worth \$400m, including 45 refurbished T-72B tanks and 1,100 drones. The first new NASAMS anti-aircraft batteries were deployed this week.

The West's stocks of weapons are not unlimited. European armies have eaten deep into theirs; even mighty America worries about eroding its own ability to fight future wars. It is Russia, however, that seems to face the most immediate shortages. It has used up most of its precision bombs and missiles, and is struggling to replace them because of sanctions. It is obtaining fresh weapons from the likes of Iran and perhaps North Korea. (China has so far heeded American warnings to stay out of the war.)

Cold calculation

Mr Putin is hoping his campaign to destroy Ukraine's electricity grid will freeze the country into submission, or at least turn it into a weak, failing state. But the evidence of past conflicts is that aerial bombing of civilians, in the absence of an effective ground campaign, rarely secures victory. Nearly 90% of Ukrainians want the country to keep fighting.

In Russia, according to the Levada Centre, a pollster, only 36% want to press on with the war, whereas 57% favour peace talks. At the same time, support for Mr Putin remains at 79%. Russians, it seems, would like the war to end but, starved of impartial news, do not blame Mr Putin for it. Still, the more he tries to drag them into fighting, the more he risks losing popular support.

Ukraine's more avid Western supporters think that, with time, Ukraine will become stronger, and Russia weaker. But Mr Putin is hoping that "General Winter" will somehow revive his fortunes, if not by weakening Ukraine's will to fight then by gnawing at the West's readiness to support it, as the heating bills balloon in Europe.

Mr Putin claims that he is ready to negotiate (from the starting point that the West should recognise his theft of Ukrainian territory) but that Ukraine's Western "masters" have prevented it from talking. The two sides held lengthy talks after Russia seized the Crimean peninsula and part of Donbas in 2014. They talked again in the spring, as Russia besieged Kyiv. But Ukraine set its face against further negotiations after Russia's retreat from Kyiv in April revealed widespread atrocities against civilians. Volodymyr Zelensky,

Ukraine's president, suggested this week that talks could be revived, but only if Russia was willing to give back Ukrainian land, pay compensation and accept responsibility for war crimes.

The West is vague about its own aims. Mr Biden has at times mused about wanting to see Mr Putin ousted from power; at others he has talked about finding "off-ramps" for the Russian leader. He defined his goals most clearly in a guest article in the *New York Times* in May: "a democratic, independent, sovereign and prosperous Ukraine with the means to deter and defend itself against further aggression". Notably, that left out the question of Ukraine's borders. Western leaders say this is for Ukraine to decide; their aim is to strengthen its negotiating hand.

More recently, though, Ukraine's backers have sounded more specific. In a statement on October 11th, leaders of the G7 group of industrialised countries offered their "full support to Ukraine's independence, territorial integrity and sovereignty in its internationally recognised borders". They demanded that Russia "completely and unconditionally withdraw" from all seized lands. Among other things, they pledged to find ways of using seized Russian assets to help fund Ukraine's reconstruction (see International section).

"The G7 statement is basically a demand for total Russian surrender, which is not a plausible diplomatic outcome. Diplomacy by definition involves give and take. The expectation should not be another Treaty of Versailles," says Samuel Charap of the RAND Corporation, an American think-tank, referring to the punitive terms imposed on Germany at the end of the first world war. The West, Ukraine and Russia, he argues, should start talking, if only to set the groundwork for more substantive negotiations in future: "Fighting and talk-

ing at the same time should be the norm."

Many disagree. "Keep up the pressure. Don't be in a hurry to draw lines on a map. It would be bureaucratic suicide. Somebody will put it up on Twitter alongside the Molotov-Ribbentrop pact," retorts Dan Fried of the Atlantic Council, another American think-tank, alluding to Nazi Germany's and the Soviet Union's carve-up of Poland in 1939.

Few Western leaders question Ukraine's ambition to recapture the territory lost since Russia invaded in February. Many would support efforts to reclaim the parts of Donbas seized in 2014. But opinion is more divided when it comes to reconquering Crimea. Many worry that the prospect of losing the peninsula might prompt a dangerous escalation from Mr Putin.

To some in the Biden administration, the war is a matter of principle: territory should never be seized by force, so all Russian gains must be reversed. Others, doubting Ukraine's ability to reconquer much more, think the time for diplomacy is soon. Either way, America is in no rush to spell out diplomatic positions that might cause rifts in the pro-Ukraine camp.

Another pressing concern is the nature of future Western security guarantees for Ukraine. They will need to be robust given that Russia will probably remain a threat to Ukraine for as long as Mr Putin is in power, if not longer. Several central and eastern European countries favour Ukraine's rapid admission to NATO, on the grounds that the alliance's commitment to mutual defence would firmly deter Russia. For all its nuclear menaces, it has so far refrained from overtly striking NATO territory.

The Biden administration, though, is wary of having to extend its nuclear umbrella to a country in a state of latent or actual conflict with Russia. Throughout, Mr Biden has been careful to minimise the



In need of a break

► risk of a direct NATO-Russia conflict for fear that it would lead to "World War III". Several NATO members in western Europe are similarly sceptical.

So attention has turned to interim, or alternative, arrangements. In September Anders Fogh Rasmussen, a former secretary-general of NATO, and Andriy Yermak, Mr Zelensky's chief of staff, proposed a "Kyiv Security Compact" which would offer security assistance short of a mutual-defence pact. Some in Ukraine considered it a betrayal. Modelled on Western support for Israel, about which Mr Zelensky has spoken, the compact would strengthen Ukraine's armed forces—in effect turning the current ad hoc support into a systematic, long-term commitment.

Ukraine's partners would promise "multi-decade" investments in the country's defence industry, massive weapons transfers, training, joint exercises and intelligence support. The compact would require neither Russia's assent nor Ukraine's neutrality. It would not preclude NATO membership. In some circumstances, there could be military intervention to help Ukraine. If it were attacked, the signatories would "use all elements of their national and collective power and take appropriate measures—which may include diplomatic, economic and military means." A wider group of countries, including Asian allies, would reinforce such military assistance with sanctions on Russia, including provisions to "snap back" any of the current penalties that may be lifted as part of a deal.

Even this may be too ambitious for Team Biden. Some ask, for instance, what commitments Ukraine would take on, by way of reforms to strengthen democracy, say, or to fight corruption. The parallel with Israel is imperfect. Among other things, Israel is a nuclear power and occupies Arab land. For Mykola Bielieskov of the National Institute for Strategic Studies, a think-tank in Kyiv, the Israeli model "is not only about mobilising our partners externally; it's also about explaining to people what it means to live next door to a crazy neighbour, to existential threats."

The sky must be the limit

Whatever the diplomatic template, Russia's blitz has proved that the West will need to help Ukraine create a properly integrated and layered air-defence system, mixing fighter aircraft, surface-to-air batteries and shoulder-launched weapons. At the moment weapons are arriving piece-meal and often cannot exchange data. There are also worries about Ukraine running out of certain types of air-defence munitions. If that were to happen Russia could then deploy much more air power in support of ground troops.

Ukraine's mix-and-match weapons—a



Uncertain harvest

"Mr Potato Head" arsenal, as some call it—cause problems elsewhere. For instance, it has no fewer than 14 different types of artillery pieces, with an average brigade operating four different sorts. "This is a logistical nightmare for them, especially when we talk about ammunition," says Nick Reynolds of RUSI, a British think-tank. Some of the weapons are wearing out badly, and Europe's defence industry, sapped by decades of low spending, is poorly placed to produce spare parts. "Red lights are flashing in terms of that support being available," adds Mr Reynolds.

How long the war goes on depends mainly on Mr Putin. He is in a bind, both in Ukraine and at home. Moderate technocrats are worried about the strains on the economy; "national patriots" such as Yevgeny Prigozhin, who commands the Wagner mercenary group, have called for purges of supposedly treacherous generals.

A pause to play at diplomacy may suit Mr Putin for a time—particularly if it allows him to consolidate some territorial gains. That may explain his recent toning down of nuclear rhetoric and his sudden casting of Ukrainians as victims of Western aggression. "The West is throwing Ukrainians into a furnace"; Russia, in contrast, "has always treated Ukrainian people with respect," Mr Putin declared on November 4th. (His propagandists and officials, though, still talk of "de-Satanising" Ukraine.) The shift fits another of Mr Putin's guises, as the champion of a global movement to cast off Western dominance.

In all this Mr Putin is seeking to woo waverers, especially in the global South. He also wants to reassure friends such as China and India, which have made plain their disapproval of his nuclear recklessness. Above all Mr Putin is interested in reaching one rich-world listener: Donald Trump, whose allies in Congress question Ameri-

can aid to Ukraine and who may soon announce another run for president.

For all his setbacks, Mr Putin is not yet out of options to persecute Ukraine and try to divide the West. Militarily, he could commit more of his air force and mobilise more troops. In the covert "grey zone" he could sabotage undersea gas pipelines and internet connections to the West, conduct bigger cyber-attacks, interfere with communications satellites and step up disinformation campaigns. He could also sink ships carrying grain from Ukraine. Ultimately, he could use tactical nuclear weapons. All this, though, would come at heavy cost: it would make Russia even more of a pariah, weaken him at home and might provoke harsh retaliation.

The stakes are higher for Mr Putin than for the West. But they are highest for Ukrainians, many of whom mistrust the very idea of talks with Russia and see military victory as their only option—even if it takes years to achieve. The more land it can regain, Ukraine reckons, the greater the chance of getting rid of Mr Putin. Yet that same prospect alarms many in the West: a rout of the Russian army might be what pushes Mr Putin to go nuclear. That is one reason why Team Biden long ago stopped talking about helping Ukraine "win".

As it has often done with Israel, America may at some point try to limit Ukraine's ambitions. It need not do so overtly; it can simply withhold the arms Ukraine needs, as it already does to an extent. It declines to provide Western aircraft, Patriot air-defence missiles and longer-range ATACMS strike missiles for fear that they might goad Russia to use nuclear weapons.

All this explains why some Ukrainians have been circulating a bittersweet message issued to Finnish troops in 1940 at the end of the "Winter War" with the Soviet Union by their commander, Carl Gustaf Mannerheim. The vastly outnumbered Finns had inflicted heavy losses on Soviet forces but nonetheless had to cede territory because help from their friends had dried up. Mannerheim wrote, signing off with the words, "We are proudly conscious of the historic duty which we shall continue to fulfil; the defence of that Western civilisation which has been our heritage for centuries, but we know also that we have paid to the very last penny any debt we may have owed the West."

Ukraine's fate depends not just on the valour of its soldiers or resilience of its people, but also on external factors it cannot control: the inscrutable calculations of Russia's despotic ruler and the fortitude of its friends. The benefits to the West of the war are already clear. Russia has been enormously weakened, making Europe's flank much easier to defend. For Ukraine, which has suffered horrific losses, the outcome looks much less certain. ■



Elections in Malaysia

Um, maybe

LEKIR

After years of political tumult, voters face a grim choice between inept parties and an appalling one

ZAMBRY ABDUL KADIR is giving his fifth pep talk of the day. A dozen men and women crowd around a table in the humid kitchen of a home in Lekir, a village in the western Malaysian seat of Lumut where Mr Zambray is standing for parliament. At his side is a whiteboard on which an aide has scrawled the electoral maths: 1,183 votes are up for grabs in this and nearby villages. A solid 583 are already in the bag, according to his ground operation. But more voters can be won over.

Mr Zambray hopes to score a crucial victory for his party, the United Malays National Organisation (UMNO), which held power continuously for 61 years until 2018, when it was booted out after a corruption megascandal that implicated the prime minister at the time, Najib Razak. An opposition coalition rode to power in elections that year. But it soon collapsed amid infighting at the top, ushering in an era of rolling political chaos.

In 2020 UMNO lent its support to a new coalition, but stayed in the background. Last year it installed its own prime minister when that arrangement, too, proved unviable. But the new man, Ismail Sabri Yaakob (pictured), the country's third leader in three years, has not been able to tinker much with the cabinet he inherited. Now the grand old party is eyeing a comeback on its own terms, leading a coalition known as Barisan Nasional. Malaysians will decide its fate, and their own, in general elections on November 19th.

The country might benefit from stabilis-

ty. With 33m people and a median age of 29, it needs many more jobs, especially for youngsters. Last year unemployment among 15- to 24-year-olds rose to 15.6%, the highest level in two decades. Though Malaysia is better off than some of its neighbours, GDP per person, at around \$11,300, has been flat since 2014. As in much of the world, the currency has fallen sharply against the dollar, making imports pricier.

Malaysia is at least enjoying a respectable recovery from the pandemic. The IMF expects growth for the full year to clock in at 5.4%. That explains Mr Ismail Sabri's decision to call an early election despite the risk of disruption posed by the monsoon. The prime minister is keen to take advantage of "the tailwind of a full economic reopening", reckons Suhaimi bin Ilias of Maybank Investment Bank.

That UMNO should so quickly be a contender to take power once more is astounding. Some \$4.5bn disappeared from Malaysia's treasury between 2009 and 2015 on Mr Najib's watch. Nearly \$700m of that haul found its way into his personal bank account. Millions of dollars of public money were lavished on art, diamonds, a superyacht and other baubles. Mr Najib was found guilty of a litany of crimes, including money-laundering, and sentenced to 12 years in prison. In August the country's highest court rejected his final appeal and ►

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► prevented him from campaigning.

UMNO built its dominance on a politics that favours the ethnic Malays and other indigenous groups who together make up 69% of the country and who believe that they deserve privileges at the expense of Chinese (23%) and Indian (7%) Malaysians. Although those privileges tend to enrich the friends of UMNO politicians and bypass the poor, many ordinary Malays seem not to notice (see chart). Meanwhile, much of the non-Malay third of the population hew to the opposition for the sake of dignity as much as for political change.

But with an electoral system biased towards seats where rural Malays live, other parties, too, must appeal to them. Anwar Ibrahim, the face of the main opposition coalition, known as Pakatan Harapan, is running in a heavily Malay seat in the state of Perak to prove his bona fides and attract media attention. On the campaign trail this month, he watched a display of a Malay martial art, before vowing to the crowd that he would preserve Malay culture.

One wild card at this year's election is the admission of a new cohort into the electorate after the voting age was lowered from 21 to 18 last year. The election commission reckons they make up 1.2m of the 5.8m first-time voters in the 21m-strong electorate. Many are attracted by Mr Anwar's message of change and cleaning up corruption. But the young are also enticed by PAS, an Islamic party that has become the main force in a third front, known as Perikatan Nasional.

Many Muslims, who are 63% of the population, want more Islam in politics. Among them is Muhammad Asyraf, who sells flowers on the side of the road near Petronas Technological University in Perak. He says he wants to see a more openly Islamic state and will vote for PAS "so the people are taken care of, so they are safe and so they do not stray from their religion". Support among Malay Muslims for *sharia* (Islamic law), which PAS endorses but UMNO does not, has risen from 52% in 2011 to 75% today, says Ben Suffian of the

Merdeka Centre, a pollster. Though PAS has been a member of the ruling coalition for the past two years, it remained junior to other parties. As its popularity rises, it is eating into UMNO's share of Malay voters.

Polls show a tight race with lots of undecided voters. UMNO has been buoyed in the past year with some bellwether state-election victories. But in recent weeks its coalition's lead has been dropping as PAS's group gains ground. No one coalition is likely to be able to command a majority in the 222-seat legislature without help from another. The non-Malays who vote for Mr Anwar's coalition despise the Islamists of PAS. Still, the possibility that Mr Anwar, an

old graduate of UMNO and a perennial prime ministerial hopeful, strikes a deal with his former party cannot be ruled out. Unless that happens, a PAS-UMNO alliance may be on the cards.

For ordinary Malaysians, all this wrangling means that little thought is being given to fixing the country's problems. Politicians will continue to fear for their own positions instead of asking themselves what Malaysia should look like 20 years from now, sighs one diplomat. There is a chance, then, that voters will look to UMNO and decide that, whatever its faults, it offers stability. That is a basis on which to run a country, but a miserable one. ■

Small victories

Taipei personality

TAIPEI

No contest is too obscure in Taiwan's quest for global recognition

JUST 13 OF THE 193 countries in the UN recognise the Republic of China as a sovereign country, among them such diplomatic heavyweights as Belize, Eswatini and Tuvalu. The name Taiwan, by which it is more commonly known, annoys the much larger People's Republic of China, which insists (with menace) that organisations from the WTO to the International Society for Horticultural Science refer to the island as "Chinese Taipei". Small wonder that Taiwan's 24m people are constantly looking for ways to affirm that they are not, in fact, ruled by the authoritarian regime in Beijing. Often they rejoice in victories that others might deem inconsequential.

Take cup-stacking, a game that, as the name suggests, involves stacking cups. Also known as sport stacking, it is a staple on Taiwanese news whenever the country wins. In June Formosa Television (FTV), a pro-independence channel, revealed that two Taiwanese primary-school pupils had set a new world record. Their achievement had even been recognised by the World Sport Stacking Association, the game's highest governing body, which FTV pointed out has its headquarters in America.

In September the government-funded Central News Agency broke the news that the country had won four gold medals at the Tug-of-War Outdoor World Championships in the Netherlands. When the Chien Kuo High School Marching Band, based in Taipei, the capital, won third place at the 19th World Music Contest, also in the Netherlands, FTV declared that the students' hard work "helped put Taiwan on the world stage".

A local chocolatier recently nabbed a gold, three silvers and two bronzes at the

Asia-Pacific Bean-to-Bar and Craft Chocolatier Competition, to much media fanfare. (Her winning confection involved hazelnut and red Oolong tea.) "RECOGNITION" is how the pro-independence *Taipei Times* described the victory of a Taiwanese troupe at the 31st Spanish Dance and Flamenco Choreography Competition in Madrid in May.

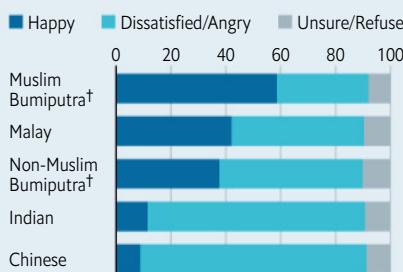
The government, too, takes pride in small wins. When an artist set a record for carving a 168-link chain out of a pencil in 2020, the foreign ministry's website touted the triumph. Another miniatrist, it noted, had in 2016 "bested contestants from around the world to claim a double championship at the prestigious Japan Hamamatsu Diorama Grand Prix" for his scale model of a Japanese eel restaurant. And when two designers won a Grammy award this year, the acclaim came right from the top. In July they were invited to meet Taiwan's president.



Soil lobby

Malaysia, government approval rating

By ethnicity, October 28th 2022, % responding*



*1,210 adults †Malays and other indigenous groups

Source: Merdeka Centre

Governance in India

Outside in

LEH

A remote corner of the country realises it preferred being neglected

LADAKH, A TERRITORY at the northern end of India, is so high up in the clouds that those arriving by plane are advised to stay in bed for the first 24 hours, to acclimatise to the thin air. Outside Leh, the main settlement, it is a place of Buddhist monasteries, vast skies and empty expanses scattered over 59,000 sq km of high-altitude desert and mountains. On all sides are towering peaks—the Himalayas, Karakoram, Ladakh and Zanskar—shielding it from China, Pakistan and the rest of India. Before a gruesome clash between Indian and Chinese forces along the disputed border in 2020, it was a place so remote and so unreal that it was easy to forget it existed.

That was, for Ladakhis, the problem. Until a few years ago, Ladakh was one of three regions in the state of Jammu and Kashmir, which is home to 12.5m people. But national governments focused on Kashmir, the Muslim-majority, militarily-riden part of the state. Even politicians in Srinagar, the state capital (in the Kashmir region), paid little attention to Ladakh's 300,000 people. And when the government in Delhi clamped down on the state in the name of fighting terrorists—cutting off all internet, for example—Ladakhis suffered too, locals complained.

In 2019 the Bharatiya Janata Party (BJP), newly re-elected nationally, revoked Jammu and Kashmir's statehood, turning it into two "union territories" (see map) run directly from Delhi, the national capital. Liberal Indians lamented what they saw as a violation of a constitutional promise of autonomy for the state. Ladakhis, however, rejoiced. They had long demanded separation from the rest of Jammu and Kashmir.

Three years on, they are disappointed. The bureaucrats who govern from Delhi have, if anything, less sense of the place and no more enthusiasm for accommodating local mores than politicians in Srinagar. Moreover, union-territory status means only national elections determine who rules the region.

Many locals now admit that they overestimated the benefits and underestimated the risks of their new status. "People expected more rights, more representation, more power, better jobs," says Namgyal (some Ladakhis use only one name), the opposition leader of the Ladakh Autonomous Hill Development Council (LAHDC) in Leh, a relatively powerless local body.

The central government's main focus is



Ladakh's long-neglected basic infrastructure, says Tashi Gyalson, a BJP man who heads the Leh chapter of LAHDC. Some administrative wrinkles remain to be ironed out, he says, but the government has expanded water, electricity and road connections in remote areas, hired more doctors and pushed for more sustainable tourism.

But migrant workers from poor states are cheaper, and outside contractors import them, say locals. Meanwhile the central government agencies in charge of improving Ladakh's infrastructure are doing so with little consultation with residents, says the opposition's Mr Namgyal. "They will just start work in a village without telling the local councillor, so there will suddenly be people digging up a road and nobody knows why."

Ladakhis say they feel overrun by "outsiders" and fear a loss of identity. Business people fret that they are unable to compete with bigger investors from elsewhere in India. Tourism accounts for about half the local economy, but the revised set-up has opened the door to newcomers. As long as Ladakh was part of Jammu and Kashmir, non-residents were barred from buying land. Those laws no longer exist. This year, nearly half a million people visited Leh, compared with 280,000 in 2019. A quarter of a million arrived in June and July alone, straining its infrastructure. Travel agents and taxi drivers are boycotting hotels and restaurants owned by non-residents.

With no provincial elections, some disgruntled locals have taken to the streets. Earlier this month groups from both Leh and Muslim-majority Kargil, along the disputed border with Pakistan, organised a joint protest to demand more rights. They want full statehood, a ban on outsiders owning land and jobs reserved for locals. They are unlikely to get their wish. Even if they do, that will not turn the clock back on Ladakh's relationship with the outside world. For better or worse, the remote mountain plateau is neglected no more. ■

Racism in Australia

Voiceless

SYDNEY

The murder of a boy in Western Australia horrifies Aboriginals

THE LAST picture of Cassius Turvey, a 15-year-old Aboriginal boy of Western Australia's Noongar and Yamatji nations, showed him lying unconscious on a hospital bed, attached to a ventilator. His head, shaved by medics, was marked with a heavy gash. He was "an innocent victim of a violent attack", the state's police said.

Cassius was walking home from school with friends in Perth, Western Australia's capital, on October 13th, when a car pulled up next to them, the boys allege, and passengers jumped out and assaulted them, yelling racial slurs. Cassius was allegedly battered with a metal pole. His injuries were so severe that he died ten days later.

The attack has horrified Aboriginals and many other Australians, too. Police have charged Jack Brearley, a white 21-year-old, with the murder and with assaulting a 13-year-old boy who survived. They say Mr Brearley's car had been damaged a day before—though there is no evidence that the boys were responsible. On November 5th footage emerged of another assault on a young Aboriginal in Western Australia. He was ambushed by two men who falsely accused him of robbery. Hannah McGlade, a Noongar human-rights lawyer at Curtin University in Perth, points to a record of "vigilante" attacks against indigenous boys accused of committing crimes.

The problem of racism aimed at Aboriginals is hardly hidden from sight in Australia. Aboriginal sports stars have been jeered by white fans. Abuse is hurled at indigenous celebrities. Australia's national broadcaster recently referred to the police an email sent to an Aboriginal presenter, Tony Armstrong. He tweeted a picture of the message, which called him "abso scum" and an "uneducated dog".

It was not just the murder that upset Aboriginals but also the response. Police warned against "unfounded speculation" about whether the killing was racially motivated. Australia has strict laws around discussing live court cases, aimed at preventing trial by media. Yet asking people to refrain from talking about racism after a violent crime can seem tin-eared and inflame passions further.

Australia has had similar debates after other murders over the past 30 years. Aboriginals are over-represented as both victims and perpetrators of murder in Australia. They suffer high rates of family breakdown and imprisonment, for which some ➤

► blame generations of discrimination and an assimilation policy which until the 1970s removed Aboriginal children from their parents. Though they are less than 4% of the population, they fill 30% of prison beds. Aboriginal teenage boys are now more likely to go to jail than to university.

Successive Australian governments have pledged to break the cycle of marginalisation by "closing the gap" between indigenous Australians and everyone else. The prime minister, Anthony Albanese, hopes his Labor government can make some progress. In part that comes down to

striking the right tone. Aboriginals took heart when he declared that Cassius's murder was "clearly racially motivated".

Mr Albanese's plan is to show that the government is listening. Given Aboriginals' tiny share of the national population, they feel their votes do not count for much and that they have little say on policies aimed at them. The prime minister supports creating a "voice to Parliament", a consultative body, to advise the federal government on matters related to indigenous affairs. He says it would be a step forward in "our nation's journey of healing".

To achieve this, Mr Albanese, who was elected in May, has promised to hold a referendum on the "voice" before his government's three-year term is up. Its passage requires a "yes" vote from a national majority as well as a majority of states. Polling suggests that Australians are confused by the idea. One recent survey found that less than half support the concept of a voice and even fewer understand what it is. Critics have dismissed the "voice" as symbolic. But symbolism, as with the official reaction to Cassius's killing, can either help or hinder race relations. ■

Banyan Caravan of chaos

Pakistan's political crisis is also a dilemma for the army's top brass

DAYS AFTER their leader was injured in an assassination attempt on November 3rd, supporters of Imran Khan, who is now out of hospital, descended on Islamabad. They blocked highways surrounding Pakistan's federal capital and vowed to bring down the government.

Since April, when Mr Khan himself was removed from power in a vote of no confidence, the former prime minister has sought to trip up his successor, Shehbaz Sharif. He has made wild accusations that the army conspired with America to depose him in favour of the more biddable Mr Sharif. And he has led a political caravan that trundles through Punjab, Pakistan's most populous province, decrying the establishment—he was shot while campaigning on his lorry.

Within hours of the shooting Mr Khan accused Mr Sharif, the interior minister and a general in military intelligence of being behind the attempted assassination. The suspected gunman, overpowered by the crowd, is in custody. He told police that he acted alone. Mr Khan insists multiple gunmen were involved, implying a conspiracy. Civilian and army leaders strongly deny Mr Khan's allegations, while condemning the attack.

The attempt on his life, Mr Khan repeated this week, only underscores the malignancy of the establishment he sets his face against, and the urgent need for a general election. One is due by next autumn at the latest. Mr Khan has momentum on his side: his party has triumphed in by-election after by-election. Now he vows to rejoin his caravan and bring out more anti-government crowds.

Facts in Pakistan are often hard to come by. Investigations run into the sand and reports get buried. But it is striking that the shooting has not generated more shock. Mr Khan and his allies say they

expected such an attempt by his opponents. They, for their part, can readily imagine Mr Khan as a ripe target for any hothead. The mutual insouciance is alarming. Pakistan has a gruesome history of political violence. The first prime minister was killed at a rally in 1951. Fifteen years ago Benazir Bhutto, a former leader and heir to a political dynasty, was assassinated shortly after her return from exile. In an attempt on her life two months earlier, 180 died. Widening political divisions today look ominous.

Mr Khan's brand of populism plays on those divisions. It requires impressive cognitive dissonance to believe that Pakistan's economic crisis, with high inflation and crippling external debt, much of it owed to China, is all the fault of Mr Sharif and his "cabal of crooks". As prime minister, Mr Khan blew up a rescue package from the IMF with ill-considered subsidies. Mr Sharif, too, has struggled to impose fiscal discipline. But he is starting to see some success in filling Pakistan's financial holes, including by reviving that IMF deal. It is hard to believe that Mr Khan

would have handled this summer's catastrophic flooding any better, either.

It is true that the 70-year-old Mr Khan is a born-again Muslim, which appeals to that redemptive part of followers' natures. Some of his anti-Americanism is grounded in a reasonable belief that the United States has done more harm than good in Pakistan's region. It stings, too, that in America's titanic struggle with China, Pakistan is expected to line up behind India, the eternal enemy. Yet it still requires dissonance to consider Mr Khan as outside the (largely pro-Western) establishment: he is an Oxford-educated former cricketing star.

Running parallel to the political crisis is a military one. The army enforces a long-standing taboo on anyone speaking about its powerful role in politics. Mr Khan, despite coming to power with support from the army, has done more than any politician in memory to shatter this taboo. For though generals smoothed his path to power in 2018, they also hastened his exit after he fell out with the army chief, General Qamar Javed Bajwa, over who should make key military appointments. Mr Khan's attacks on him now seem outrageous to officers used to deference from mere civilians.

The revival in Mr Khan's political fortunes unsettles the generals, who hate being dragged publicly into the political turmoil. General Bajwa, whom Mr Khan has encouraged Pakistanis to scorn, is supposed to retire at the end of this month. Yet the political crisis complicates the naming of a successor. Mr Khan's gamble may be to engender such popular opposition to his despised "establishment" that the generals, wanting an end to big protests, will help him back to power. Yet all sides know how fraught such a bet might prove.





America and China

Dim hopes of detente

Joe Biden and Xi Jinping may soon meet in Indonesia. Can they halt a downward spiral in relations?

PROSPECTS FOR a cold-war detente looked dim ahead of an impromptu meeting between Lyndon Johnson, America's president, and Alexei Kosygin, the Soviet premier, in 1967. The superpowers' leaders had not met since 1961, when a Kennedy-Khrushchev summit in Vienna ended in acrimony. Five days after Kosygin landed in New York to address the United Nations, Soviet and American officials were still wrangling over when and where he could meet Johnson privately. One White House adviser gave the get-together just a 20% chance of improving relations.

Those odds might seem generous if applied to an expected meeting between America's current president, Joe Biden, and China's leader, Xi Jinping, during a G20 summit in Bali on November 15th and 16th. As the two sides try to thrash out details of their leaders' first face-to-face encounter since Mr Biden's election, both are signalling that they want to halt a worsening of relations that increasingly echoes the cold war. Given the stakes, a meeting in Bali would be progress in itself. But domestic politics on both sides are limiting pros-

pects for the kind of stabilising mechanisms that underpinned the Soviet-American detente in the 1970s.

Mr Biden will probably enter the meeting, if it goes ahead, having lost control of the House of Representatives in midterm elections on November 8th (as *The Economist* went to press, it was even less clear which party would control the Senate). That is not for want of a hard line against China—a rare issue of bipartisan consensus. Mr Biden has, in many ways, been tougher on China than his Republican predecessor, imposing tight restrictions on exports to China of American technology and repeatedly pledging to defend Taiwan, the self-governing island that China seeks to unify with the mainland.

In fact, many American allies, business

leaders and foreign-policy experts feel Mr Biden has gone too far and want him to try to stabilise ties. A paper published on November 3rd by the Brookings Institution, a think-tank in Washington, warned Mr Biden against trying to out-hawk Republicans on China and urged him to focus on areas of long-term mutual interest. "The purpose of strategy is to advance national objectives. America's current approach towards its bilateral relationship with China is failing to meet this standard," said the paper, two of whose authors worked on China policy in the Obama administration.

White House officials talk of "finding a floor" in the relationship. They are seeking new ways to avoid conflict and co-operate on issues like climate change and food security. But they balk at Chinese demands to ease export controls and provide new assurances on Taiwan. On November 9th Mr Biden said he wanted to discuss both sides' "red lines" but was "not willing to make any fundamental concessions". His reluctance derives less from electoral angst than concern about Mr Xi's ambitions. Still, with a presidential poll looming, the midterm results could limit Mr Biden's room for manoeuvre while convincing Mr Xi that he is dealing with a lame duck.

A Republican-led House could also trigger crises beyond Mr Biden's control, especially if Kevin McCarthy, the probable new speaker of the House, visits Taiwan as he has suggested he would. After a trip there in August by the current speaker, Nancy Pelosi, China staged massive military drills ➤

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▶ around Taiwan and cut high-level dialogue with America. Chinese military ships and planes have since made repeated incursions across the median line of the Taiwan Strait. A visit by Mr McCarthy would be certain to provoke a further escalation in China's coercive measures.

Another twist is that local elections in Taiwan on November 26th could weaken the Kuomintang, a party favoured by Chinese leaders because it advocates closer ties with the mainland. That would increase the chances that an independence-leaning candidate wins Taiwan's presidential election in 2024.

"From the Chinese point of view, the political calendar between now and November 2024 is pretty dismal," says Jude Blanchette of the Centre for Strategic and International Studies, another think-tank in Washington. He hopes it doesn't take something close to a conflict before the two sides have an honest conversation about the relationship. At the moment, though, neither side seems interested in finding areas for substantial compromise.

Where Xi stands

Mr Xi, in contrast to his American counterpart, heads to Bali in a stronger political position than any Chinese leader since Mao Zedong. Not only did he secure a third term as chief at the Communist Party's congress last month, he also stacked the new Politburo Standing Committee—the party's top leadership body—with loyalists, none of whom is considered a potential successor. That sent a clear signal that he intends to dominate decision-making for at least another ten years.

In theory, Mr Xi now has more space to compromise. Some Chinese experts suggest that he and his emissaries have signalled this in recent public statements. On October 26th Mr Xi sent a congratulatory message to a gala dinner of the National Committee on US-China Relations, a non-profit group in America, saying China was ready to "find the right way to get along". Jing Quan, the third-ranking Chinese diplomat in Washington, told a conference on November 2nd that the Chinese leadership did not have a timetable for attacking Taiwan and wanted peaceful unification above all. China and America, he added, were "still friends", bound by trade, who could co-operate in many areas.

Yet those signals have been eclipsed by the overwhelming message from Mr Xi's report to the party congress, in which he warned of "dangerous storms" ahead, and called for faster military modernisation, citing "gross provocations" from other countries interfering over Taiwan. In private conversations with American counterparts, Chinese officials and academics have also continued to blame America for the downturn in relations, insisting that it

must change course if the two sides are to co-operate in other areas.

Mr Xi's concentration of power and his "zero-covid" strategy have exacerbated a structural problem in relations, too, by further limiting channels of communication. Even retired leaders are no longer considered to have much influence on Mr Xi, while newer ones, chosen mostly for their loyalty, are unlikely to advocate a change of course. Mr Xi's covid restrictions have also severely curtailed face-to-face meetings between academics, business leaders and lower-level officials on both sides.

Nor is there a Chinese equivalent of Anatoly Dobrynin, the Soviet ambassador in Washington from 1962 to 1986 who was a full member of the Soviet Central Committee from 1971 and a point man on detente. Qin Gang, China's ambassador in Washington since mid-2021, has just joined the Central Committee. But he is expected to head home to be China's next foreign minister. Nicholas Burns, America's ambassador in Beijing, is empowered to represent Mr Biden but has little access to Mr Xi's inner circle. The relationship thus depends increasingly on direct contact between Mr Xi and Mr Biden, which is hard to arrange.

There is still a chance that they could make more progress than expected in Bali. When Johnson and Kosygin finally met in Glassboro, New Jersey, they held ten hours of relatively amicable talks, expressing a common desire to shield their grandchildren from the horrors of war. There were no immediate breakthroughs, and relations suffered a setback in 1968, when the Soviet Union invaded Czechoslovakia. But the Glassboro meeting helped pave the way for the summits and security agreements that underpinned detente in the 1970s.

American and Chinese officials have long rejected comparisons with the cold war, worrying that they could be self-fulfilling. China, unlike the Soviet Union, has deep commercial ties with America and does not seek global revolution. The two powers are not fighting proxy wars. Yet the parallels grow more striking as each locks in long-term plans to confront the other economically and militarily. And without alternatives, the cold war at least provides models for managing tensions, such as the Incidents at Sea agreement signed in 1972.

Some hope that Mr Biden and Mr Xi will draw on the personal chemistry they tried to generate during a series of meetings when they were both vice-presidents in 2011 and 2012. The fear is that neither will be willing to compromise until a bigger crisis changes their strategic calculus. A more pessimistic analogy might be the Vienna summit in 1961, when Kennedy and Khrushchev butted heads on issues including Western access to Berlin. The following year the Cuban missile crisis brought them to the brink of nuclear war. ■

Governance and control

Neighbourhood watch

How Xi Jinping is mobilising the masses to police themselves

IN 1963 MAO ZEDONG launched a campaign known as the "Four Clean-ups", an attempt to rid China's politics, economy, organisations and ideology of reactionary elements. Ordinary people were encouraged to name and shame anyone they deemed ideologically suspicious. Mao seemed particularly pleased with the small town of Fengqiao in the east. Around 900 of its 65,000 residents were called out by their neighbours in public "denunciation rallies". The "Fengqiao model" demonstrated how the party could enlist people to solve problems at the local level, Mao said. The larger campaign resulted in tens of thousands of deaths and was a precursor to the horrors of the Cultural Revolution.

China's current ruler, Xi Jinping, seems to share Mao's taste for mobilising the masses to police one another (if not for the chaos and mass murder of the earlier effort). Mr Xi praises the Fengqiao model, which he has redefined as a way of empowering people. He talks of *qunfang qunzhi*, or "mass prevention and mass governance". In reality he is using people to supplement the Communist Party's other tools of control. It is a low-tech arm of a high-tech police state. Rwanda, a small African autocracy, has something similar.

One example of Mr Xi's approach is the proliferation of volunteer patrols made up of ordinary citizens who watch their neighbours for suspicious activity. Anoth-



Area of control

er is the system of grid-style governance that divides neighbourhoods into small sections for closer monitoring. Lately a new “ten-household system” has emerged in several provinces, making those grid sections even more granular.

Under the new system households are organised in groups of ten and managed by a leader, such as a veteran or village cadre. The leader must be “politically reliable”, states an official report from the city of Neijiang in Sichuan province. They go door to door, passing down party orders and collecting information to feed back up the chain. In part of the province of Qinghai, for example, leaders are tasked with understanding “the ideological status and actions” of the region’s Tibetan nomads. They ensure that the party’s work “covers everything, with no blind spots”, says a local party official.

Chinese rulers have a long history of organising households into groups of ten in order to enhance their control. The law of *shijia lianzuo* dates back to the Qin dynasty, which ruled from 221BC to around 207BC. It called for a ten-family unit to be punished for offences committed by any member of the group. The *baojia* system, created in the 11th century during the Song dynasty, organised Chinese families in groups of ten for mutual monitoring and defence.

But the modern-day incarnation of the system is probably more informed by experiences in Xinjiang, where the government has spent years persecuting Uyghurs and other ethnic minorities. In 2017 officials introduced a ten-household “joint defence” system, compelling members of each unit to hold counter-terrorism drills with local police. Residents and shopkeepers had to buy batons, riot shields and alarm systems that could be activated by the authorities. When the alarm sounded, people would run outside with their kit and surround an imaginary “terrorist”. One former resident recalls having to shout, “Surround the bad guy, raise your sticks!”

Those who didn’t comply risked being fined or having their shops closed down. Worse, they might be thrown into “re-education” camps where hundreds of thousands of Xinjiang’s people were detained. Among the households were designated informants, says the resident, but no one knew who they were. “It destroyed the trust between people,” he says.

Elsewhere in China, the ten-household system may appear more benign. In some areas it was reportedly instituted as a way of monitoring public health early in the pandemic, then maintained owing to its effectiveness in applying the party’s policies. But state-media reports suggest security drills are now part of the system, too, in many places. Mr Xi may paint that as delivering yet more power to the people. His real aim is control. ■

Board games

Going home early

BEIJING

Why Chinese players of Go aren't winning any more

WHEN A NATION’s fortunes rise or fall, so too do its fortunes in Go.” So said Marshal Chen Yi, a soldier in China’s civil war. He was a keen player of the ancient board game, where opponents capture territory by placing black and white stones on a 19-by-19 square grid. His observation rings true. In the second half of the 20th century, an economically vibrant Japan dominated international Go competitions. Over the past two decades, as China boomed, its Go players took home many of the most important trophies.

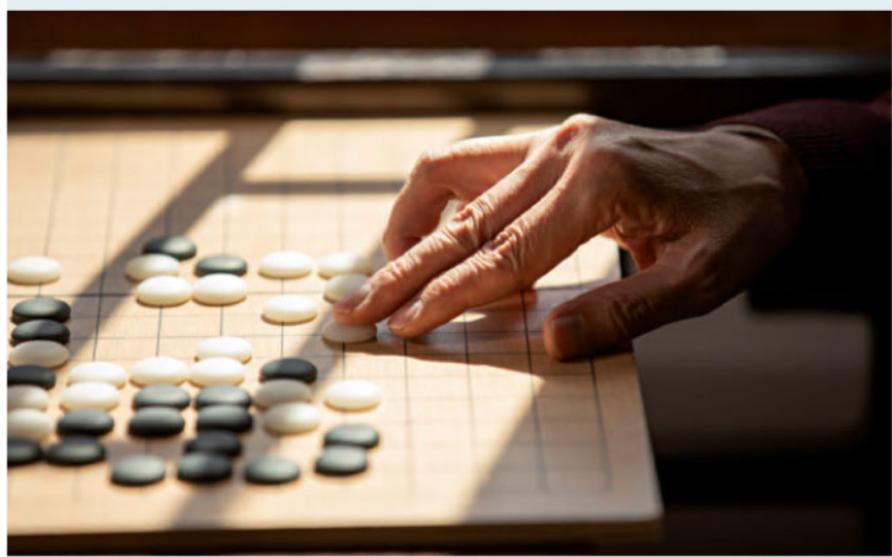
But in recent years Chinese players have been losing more than they have been winning. Things reached a new low this month, when, for the first time since 2000, not a single Chinese player made it to the semi-finals of the prestigious Samsung Fire Cup. Competitors from South Korea, another country passionate about the game, took all the top spots (Shin Jin-seo won on November 8th). Marshal Chen’s maxim has begun popping up in China’s online Go forums. “This year the nation just hasn’t been fortunate,” wrote one downcast fan. “You can see it in the GDP numbers, too.”

Some in China blame the lack of trophies on the attitude of players and coaches towards artificial intelligence (AI). In 2016 a computer program created by Google, called AlphaGo, beat Lee Sedol, a South Korean Go master. The next year it beat China’s Ke Jie, then the world’s best player. Since then many

international players have used computers to help them train. But Chinese players have not embraced AI as much as the Koreans have, argues Stephen Hu, an instructor in Beijing whose company is developing a Go learning app. Mr Ke, who is still China’s best player, has complained about AI training techniques, saying they tarnish the game’s beauty.

Chinese players face an even bigger challenge in the government’s “zero-covid” policy, which relies on lockdowns and travel restrictions to prevent big outbreaks of covid-19. Before the pandemic elite Go players would travel most weeks to compete in domestic tournaments, where they gained valuable experience in performing under pressure. Over the past three years, though, many tournaments have been cancelled because of covid controls. Corporate sponsorships, which were always difficult to attract, have dried up as a result, mostly, of the sputtering economy.

Covid-related limits on travel have also made it harder for the national team to meet up and analyse their opponents’ playing styles. “It has been very difficult for us to do intensive training,” said Yu Bin, the Chinese team’s coach, in September. China’s disappointing record in Go tournaments may not inspire the same level of frustration as invasive apps, overbearing pandemic workers and draconian restrictions. But for some people, it is yet another reason to be frustrated with the zero-covid policy.



Rocky times

Chaguan | Mr Xi amends the Chinese Dream

As the economy slows, the social contract between party and people changes



FOR RUN-OF-THE-MILL autocrats, it is enough to control the words and deeds of their subjects. Truly ambitious leaders want to guide their people's dreams.

China's supreme leader, Xi Jinping, has displayed vast ambition since taking charge of the Communist Party a decade ago. He has, among other things, sought to inspire patriotic reveries. Days after becoming party chief Mr Xi promised his country a "Chinese Dream" of restored national greatness by mid-century. Over time, proposed elements of this "rejuvenation" have included building a moderately prosperous, strong and harmonious (meaning orderly) society, world-class armed forces, a cleaner environment and a return to the centre stage of global affairs. Mr Xi pledged to bring about this dream once more in his report to the 20th party congress last month, from which he emerged with a mandate to rule for another term (or, perhaps, for life). But Chinese business elites, reformist officials and liberal intellectuals have been plunged into gloom by the congress. Some noticed that Mr Xi's vision of the future is changing in troubling ways, becoming more focused on collective goals and less tolerant of individual dreams.

In Mr Xi's second decade, the task of making China great again sounds like a party-directed mass campaign. In this austere vision, Mr Xi talks of the need to struggle and pursue self-reliance in response to pressure from the outside world, above all from the American-led West. To be sure, the party has always crushed some dreams. It has never tolerated challenges to its political or ideological authority, or shied away from harsh enforcement of its policies. But for much of the past four decades, China's economic rise and reopening to the world were powered by and left room for the personal ambitions of hundreds of millions of individuals.

Those strivers and risk-takers included farmers leaving villages to become migrant workers and founders of private businesses, from small shops to billion-dollar technology giants. They were families buying apartments in half-built housing complexes to boost a son's chances of marriage. Among their number were parents pouring money into after-school classes for a struggling child, or buying online English lessons from a tutor in the West for a daughter longing to study abroad. Young Chinese enjoyed personal freedoms that would have staggered parents or grandparents

raised during the xenophobic frenzies of the Mao years. They watched foreign films and played online video games from America. Others turned to religion for spiritual solace.

For the party, such choices threatened its monopoly on hearts and minds. Some dreams widened already large inequalities and contributed to pressures felt by the urban middle classes, who talk of unbearable competition for the best universities, jobs and marriage partners, and who, perhaps in consequence, are marrying less and having fewer children. The party duly acted.

Starting in 2015 Mr Xi moved to bring religion under even stricter party control. Two years later, at the 19th party congress, he emphasised the dangers of "unbalanced and inadequate growth" and pledged to "adjust excessive incomes". Since then he has stressed "common prosperity", an egalitarian policy with a populist edge. In 2021 Mr Xi stunned students and educators with what amounts to a ban on for-profit tutoring of schoolchildren, including by online language teachers logging on from abroad. Officials called the ban a boon to stressed parents. Alarmed by speculation in housing (a real problem), Mr Xi has moved to deflate the sector, triggering a crisis in market confidence. Online video-game platforms must now limit young players to a few hours a week. Regulators have slashed the number of foreign films in cinemas.

Foreign analysts have at times struggled to label these trends. They talk of Mr Xi moving to the left economically but to the right when stoking nationalism. In elite Beijing circles, there is agonised debate about whether Mr Xi even approves of private business, or sees it as a necessary evil. At times the panic seems to be running ahead of official policies. Chaguan has heard several Chinese intellectuals raise, unprompted, recent praise in state media for a decades-old system of co-operative shops and food suppliers, and express fears that the planned economy is coming back.

A Great Leap Backward

One way to understand this moment is to see Mr Xi changing the social contract between the party and people. Individual aspirations are being downplayed in favour of the collective interest. Scholars talk of a return to the "mass line" of the Mao years: jargon for efforts to persuade the public to embrace goals set by the party, and to see them as reflections of their own wishes.

The Chinese Dream is changing in response. In 2013 Mr Xi wrote to archaeology students that this grand project would require "integrating individual dreams to the national cause". At the 19th party congress in 2017 he urged the party to help young people fulfil "youthful dreams". At this year's congress, Mr Xi scolded the young to heed the party, pursue realistic goals and show more grit.

Soon afterwards, Mr Xi visited Red Flag Canal, a vast irrigation project in the central province of Henan that saw armies of farmers and even a youth brigade dig through solid rock to divert a river in the early 1960s. He urged youngsters to learn from their forebears, including those who sacrificed their lives for the common good. Sounding quite the irascible patriarch, Mr Xi declared: "The younger generation should inherit and carry forward the spirit of hard work, self-reliance and strenuous toil, abandon arrogance and pampering, and engrave the blood of their youth on the monuments of history, just as our fathers did."

For any ruler, amending a social contract involves risks. The party has long drawn legitimacy from rising material prosperity. Now it is giving greater emphasis to collective, national pride. By all appearances, that fits Mr Xi's stern worldview. Then again, if the economy keeps slowing, he may not have much choice. ■



The midterms

False tsunami alert

WASHINGTON, DC

A Republican victory will be much more marginal than Democrats feared

IMAGINE IF NOAH's prognostications about a world-ending flood had ended in a light shower. That is roughly the situation faced by Republicans who had been expecting a biblical sort of rebuke of President Joe Biden in the midterm elections. Despite clear voter discontent with Mr Biden and the pace of inflation, Republicans managed only a limp showing. As final results were being tallied, they looked on track to barely pick up the five seats needed for a majority in the House of Representatives (a typical loss for a president's party in the modern era is 30 seats). That will be sufficient for Kevin McCarthy, the Republican leader in the House, to wrest the speaker's gavel from Nancy Pelosi, the Democratic leader, and ensure divided government in Washington for the next two years. But it is hardly a spectacular showing.

The same is true of the contest to control the Senate, which may take weeks to decide, due to the need for a run-off election in Georgia in December. Taking the Senate would have required netting only a

single additional seat—but it now looks likelier than not that even this low bar will not be met (see chart 1 on next page). Democrats never met the attacks that Republicans launched at them on crime, inflation, indoctrination of schoolchildren and immigration with a convincing or cohesive rejoinder. And yet the morning after the election there was, surprisingly, more need for Republican soul-searching than for Democratic recriminations.

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Several sorts of extremism may have robbed Republicans of the marginal seats they needed to secure a more convincing victory. The first was over abortion, which became an immediate rallying cry for Democrats when the Supreme Court overturned *Roe v Wade*, the case that had established a right to terminate a pregnancy up until the point of fetal viability, in June. Although most Americans supported some limitations on the procedure, they also found bans pitched by many Republicans too extreme. In the suburban battlegrounds for the House, abortion proved a potent battering-ram for Democrats, who improved their margins in districts with lots of white, college-educated voters—previously a reliable constituency for the Republicans (see chart 2 on next page).

Voters in Michigan resoundingly rejected Tudor Dixon, the Republican nominee for governor, who never managed to outrun her belief that abortions should be prohibited even in cases of rape. They also passed a constitutional amendment enshrining a right to the procedure in the state constitution. Even in Kentucky, where Republicans beat Democrats statewide as expected, voters narrowly rejected a referendum to amend the state constitution to allow abortion restrictions.

More consequential was the pall that Donald Trump continued to cast over his party. He intervened mightily in the election's primaries, endorsing candidates for ➤

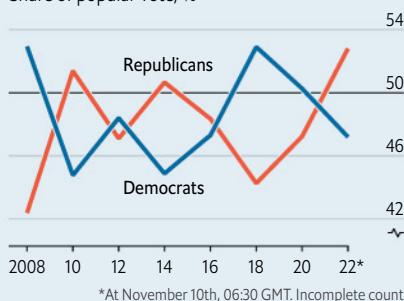
No red wave

United States, congressional election results

■ Democrats ■ Republicans

Senate, winning party, 2022*

Sources: House.gov; The Economist

House of Representatives
Share of popular vote, %

*At November 10th, 06:30 GMT. Incomplete count

► their willingness to parrot his lies about a stolen presidential election above all else. In critical Senate contests, the political neophytes that he helped to secure nominations for lost support relative to the presidential results of 2020. Mehmet Oz, a celebrity doctor, lost a not especially close race to be senator from Pennsylvania to John Fetterman, who suffered a near-fatal stroke months ago. Although J.D. Vance won Republicans a Senate seat in Ohio, it was a closer contest than expected. Having once been critical of Mr Trump, before fawning over him in a bid to win his endorsement, Mr Vance seemed to change yet again in his victory speech in Columbus: he did not mention the former president.

Mr Trump's repeated insinuations in the days leading up the midterms that he would announce another presidential run may also have reminded Americans of the chaotic future that Republican leadership promised. The attack on the Capitol on January 6th 2021—which the Republican Party is committed to ignoring on its moderate end and embracing on its radical end—was not as much a stain on the party as Democrats may have hoped. But the most fervent champions in the anti-democratic front, like Doug Mastriano, a Christian nationalist who was running to be gover-

nor of Pennsylvania, faltered badly.

Whether or not the unexpectedly poor results scupper plans for Mr Trump's announcement, his confidence will be unbruised: "I think if they win, I should get all the credit. And if they lose, I should not be blamed at all," he told a conservative news programme on the eve of the election.

Cold comfort for Democrats

Democrats endured losses, even if these were not as apocalyptic as feared. Stacey Abrams, who became a progressive superhero after complaining that she had narrowly lost her bid to be the Democratic governor of Georgia due to voter suppression, lost once again to Brian Kemp, by a bigger margin of eight points. This time she immediately conceded defeat. Democrats did worse than expected in New York, traditionally a stronghold. Kathy Hochul, the incumbent governor, was elected by a surprisingly thin margin of six points, and Republicans flipped several House seats in the state. One was that of Sean Patrick Maloney, who chaired the party's national campaign committee. The worst drubbing was in Florida, where Democrats lost by an astonishing 16 points in the Senate contest and nearly 20 points in the governor's race.

It helped that the significant erosion of

Democratic support among Hispanic voters in 2020 did not appear to get worse in this race. Our analysis of initial returns shows that in heavily Hispanic congressional districts, Democratic margins actually improved (see chart 2). Republicans were unable to flip all three congressional districts along the Mexican border of Texas as they had hoped, and Democrats did not seem to lose ground in other states with large Hispanic voting blocs, such as Arizona and Nevada. One exception was again found in Florida, where Ron DeSantis, the Republican governor, turned Miami-Dade County red, winning it by 11 points when Mr Biden had won it by seven in 2020 and Hillary Clinton won it by 30 in 2016. Indeed, Mr DeSantis, whose cold war with Mr Trump over the leadership of the Republican Party has begun to hot up, is perhaps the most chuffed politician in America at the moment (see next story).

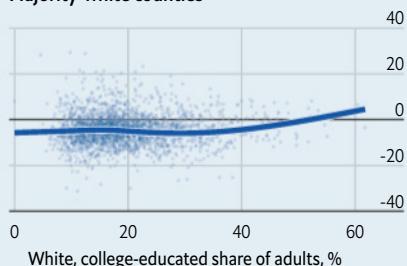
In the past seven years that Mr Trump has led the Republicans, and transformed the country's politics, rarely has his grip on the party looked as tenuous as it does now. Jostling for the next election is well and truly under way, and not only on the Republican side. Mr Biden has taken advantage of the unexpectedly minimal losses to try to quell the insurrectionists in his own party, reiterating that he plans to run again in 2024 despite his age (see Lexington).

Expectations for the divided government in prospect for the next two years are low. Mr McCarthy will probably obtain the speakership that he has so desperately sought. But he will do so with such a small majority that the hard-right element of his party may whip him harder than he does them. If so, the White House's remaining legislative agenda of large-scale social investments and tax increases on the wealthy will be largely abandoned.

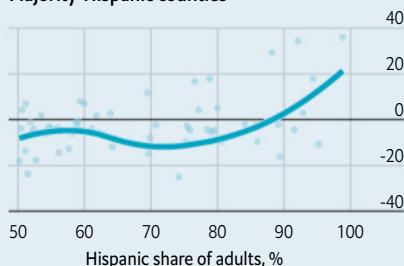
Much of the administration's energy could be sapped by bruising battles with Republicans who would use the leverage of the country's debt ceiling and need to pass a budget to enact concessions on spending, including, potentially putting the continued military support for Ukraine at risk. The January 6th committee would be decommissioned; its investigations might even be subject to counter-investigation. An unrelenting series of probes into the administration's massive spending, mismanagement of the southern border and the peccadilloes of the president's son, Hunter Biden, will produce perpetual embarrassment. Like most varieties of joy, the one that Democrats are currently experiencing will prove ephemeral. ■

The demographic difference

United States counties, change in Democratic vote margin, 2020-22*, % points

Majority-white counties

Sources: Decision Desk HQ; The Economist

Majority-Hispanic counties

*Margin in 2022 House races minus margin in 2020 presidential race.
Estimate of full returns where final counts not published

See our Results pages

To explore updated House and Senate results, go to economist.com/midterms

Beyond Congress

Ron DeSantis and other winners

DALLAS

The state-level elections will have profound consequences for the country

FOR THOSE riveted by the drama of politics in Washington, DC, candidates for state-level posts are often regarded as minor characters, upstaged by congressional stars. The reality is different. Individuals and parties who won power within states on November 8th will matter even more than usual if, as the final tallies are expected to show, Washington descends into partisan semi-paralysis for the next two years.

There were 36 governor's races. The star performance was by Ron DeSantis, the governor of Florida. A red wave may not have engulfed the whole country, but it swept the Sunshine State. Mr DeSantis trounced his Democratic rival, Charlie Crist, by around 20 points. In 2018 Mr DeSantis won by a paltry 32,000 votes (0.4 points).

His victory in South Florida was especially noteworthy. Miami-Dade County voted Republican for the first time since 2002. Hispanics, who had not supported Mr DeSantis in his first gubernatorial bid, connected this time with his outspoken style and his support for parental say in the school curriculum and opposition to shutdowns of businesses during covid. His adept handling of Hurricane Ian, a destructive and deadly hurricane that hit Florida in September, also won him broad support.

Mr DeSantis's victory says a lot about a changing Florida and carries national significance too. As more Americans have moved to Florida, Republican registration has shot up. Since March 2020 roughly 400,000 people have relocated from other states and registered to vote in Florida:



First Family in the making?

nearly half of them are Republicans, double the share who registered as Democrats. Mr DeSantis's big win will serve as proof of his broad appeal as he prepares a run for president, pitting him against Donald Trump, who helped him win office originally but now snidely suggests he is willing to "tell you things about him that won't be very flattering".

A big question is whether Mr DeSantis will continue to push to the right to brandish his reputation as a conservative populist or soften his approach in preparation for a national run. Susan MacManus, of the University of South Florida, predicts that Mr DeSantis and the Florida legislature will be "more cautious" about taking on divisive social issues and will focus instead in the coming year on "three E's"—education, the economy and the environment—which are winning issues with voters.

Whichever direction Mr DeSantis goes, he will be closely watched. He is likely to spar frequently with President Joe Biden, as well as with another governor who won re-election by a large margin, Gavin Newsom in California. Mr Newsom is also mulling a presidential run and will use his next term to position California as a leading incubator of Democratic policies on the environment, labour law and more.

One more antagonist with Mr Biden in his sights will be Ken Paxton, Texas's attorney-general, who also won re-election. As the top law-enforcement officer in Texas since 2015, he has been indicted on federal securities-fraud charges and is reportedly under investigation by the FBI for abusing his office to help a campaign donor. (He denies wrongdoing.) Republican voters have remained indifferent to his ethical scandals. Mr Paxton has delighted in throwing sticks in the spokes of Mr Biden's presidency, while greasing the wheels of Donald Trump's. He will eagerly sue the White House over policies that Mr Biden tries to advance via executive order in the face of a divided Congress, predicts Mark Jones of Rice University in Houston.

State legislatures will play a strong role as either allies or foils of leaders in Washington, DC. Much as Democrats did better than some predicted in contests for the House and Senate, they also enjoyed some notable victories in races for state legislatures. In Michigan they flipped both legislative chambers, taking total control of state government (with the successful re-election of Michigan's governor, Gretchen Whitmer) for the first time in almost 40 years. In Minnesota, which until election day was one of the last remaining divided state legislatures in the country, Democrats flipped the state Senate, so will also have full control of both chambers and the governor's office.

Control of statehouses will matter especially in the years ahead as states press for-

ward with policies on abortion, the environment and energy. As politicians in Washington, DC, wrangle over spending, government shutdowns and other issues, it will be "in even more areas of policy that the federal government isn't acting where states are going to have to fill the void", predicts Chris Warshaw, of George Washington University, co-author of the book "Dynamic Democracy".

It will also carry big consequences for future elections. In December the Supreme Court is set to hear arguments in a case concerning the "independent state legislature theory", which would give near-total control to state legislatures (and not governors or state courts) in how to conduct elections in the future. This has heightened the urgency of ensuring that state legislatures are controlled by people who will act ethically in election certification, says Daniel Squadron, a former state legislator who runs the States Project, a Democratic "super PAC". The stakes in states could not be higher. ■

Polls v results

Erring in the opposite direction

WASHINGTON, DC

Unusually, pollsters may have slightly underestimated Democrats

MIDTERM MATHS

THE GROUP that needed the best midterm election night was not America's Democrats or Republicans, but its pollsters. After the 2016 and 2020 cycles, which saw the worst polling errors since the 1980s, the industry has been under heavy scrutiny. Some have claimed that pollsters' tools are broken; others, that they are now simply irrelevant. Another poor showing could have ended many public-polling operations. Such fears can now be assuaged. The pollsters had a rosy year.

Take the House of Representatives. Though the final tally will not be known for some time, *The Economist* has built a statistical model to estimate vote-counts in each race based on the number of outstanding ballots in each county. This model shows Republicans on track to win roughly 50.8% of the total votes cast for either major party in the chamber. If so, pollsters will have come impressively close: our aggregate of so-called generic-ballot polls had the party winning 50.4%.

Such a showing would make the polls this year some of the most accurate ever. In ►

► midterm elections since 1942, the generic ballot has missed the Democrats' share of the House popular vote by nearly three percentage points on average. Error has been below one point in only a fifth of all midterm contests over the same period.

Pollsters did similarly well in the Senate. In Georgia, for example, our poll-of-polls found Raphael Warnock, the incumbent Democratic senator, within the margin of error with Herschel Walker, a former American-football star. Mr Warnock leads in the current vote-count by just under one percentage point. And in Ohio, Tim Ryan was trailing his Republican opponent, J.D. Vance, by six points in our average of polls. With nearly all the votes counted, he lost by the same amount.

All this is a stark contrast with the misfires in 2020. Then, pollsters in Ohio underestimated Donald Trump's margin of victory by six points. In Iowa they overestimated Mr Biden's vote by eight points; in Wisconsin by seven; in Florida by six; and so on. This time, in Iowa the polling error was just 2.6 points. In North Carolina's competitive Senate race, our polling average was spot-on—compared with a five-point error last time.

The story is much the same elsewhere. Across 19 states that had competitive Senate races this year, polls for presidential and Senate races in 2020 overestimated Democratic candidates' vote margin by an average of 4.7 points. This year they appear to have undershot the party by 0.9 points on average. Several notable states saw complete reversals of their previous biases. In Pennsylvania the senator-elect, John Fetterman, is on track to beat his opponent, Mehmet Oz, by roughly four percentage points. We had Mr Fetterman in a tie, making for a four-point error against him. In 2020 the polls overestimated Democrats by the same amount. Polls appear to have

underestimated Democrats in Colorado, New Hampshire, Washington and Wisconsin as well (see chart).

It will take months for pollsters to probe why they did not suffer so badly this year from the methodological spectres haunting their methods last time. One theory is that Donald Trump's presence on the ticket heightens turnout among lower-propensity voters who do not answer pollsters' calls. That caused polls to underestimate Republicans in presidential years but not in midterms.

Another possibility is that aggregates were dominated by pollsters who are friendly towards Republicans, biasing our forecasts. Nine of the final ten polls released for the New Hampshire Senate race, for example, came from firms that our algorithms estimate were friendlier towards Republicans than the average pollster. That is a good reminder that, when it comes to election prediction, most prognosticators are at the mercy of the pollsters. This time round, they have done well. ■

cowboy-hatted conspiracist who once admitted belonging to the Oath Keepers militia, could become Arizona's next secretary of state. Nevadans may elect a secretary of state who wants to ditch voting machines in favour of hand-counting ballots.

Even if these zealots lose their races, Mr Trump's Big Lie will continue to percolate, for three reasons. First, some of them may claim victory anyway. "We had a big day today," Ms Lake told her election-night crowd, "and don't let those cheaters and crooks think anything different." Second, Mr Trump is readying to run for president again. Third, many Republican voters have adopted the Big Lie as a quasi-religious belief, and won't abandon it overnight.

Research shows that Americans are more confident that their vote was counted as they intended when their preferred party wins. Mr Trump's allegations of fraud leading up to and after the election amplified that effect in 2020. "People who are primed to not want to trust the election results are being given the fuel not to believe it by political leaders that they trust," says Lawrence Norden of the Brennan Centre for Justice. "The only way to put the toothpaste back in the tube," he argues, "is if you have leadership in both political parties pushing really strongly back against this."

But disavowing the Big Lie means crossing Mr Trump, and until Tuesday night it seemed inconceivable that the Republican Party would do so. Perhaps the poor performance of many of his favoured candidates will induce Republicans to question the wisdom of shackling themselves to the former president and his favourite conspiracy theories. Mr Trump's diehard fans may want to relitigate the 2020 election, but most Americans want to move on.

Electoral reforms could make it harder for extremists to win elections. Nevadans voted on a ballot measure that would establish non-partisan primaries in which the top five vote-getters advance. All registered voters would be able to participate, rather than just registered party members, opening the primary to people with weaker partisan preferences. The general election would then be decided using ranked-choice voting. If the measure passes (the votes are still being counted), hard-left and hard-right candidates would have to appeal to the general electorate, not just the most-engaged slice of their own party.

Election workers are trying to dispel voters' anxieties. Many municipalities offer tours of polling places. Maricopa County, Arizona's most populous, live-streamed its workers as they counted ballots. A room full of mostly older Americans stare at screens, and occasionally make marks on the papers in front of them. If the conspiracists crying fraud took the time to watch, they would probably be bored by what they saw. That is as it should be. ■

Conspiracy peddlers

Defeating the anti-democrats

LOS ANGELES

Many Republican election deniers lost their statewide races

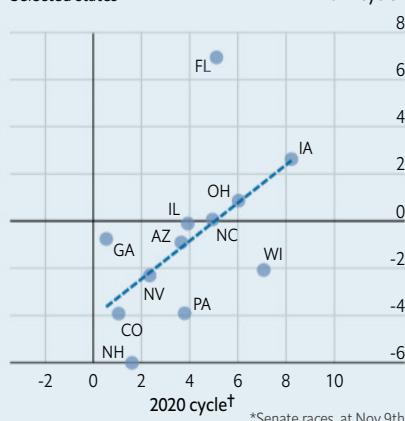
ONE OF THE ironies, and worries, of these midterms was the number of Republican candidates peddling election conspiracy theories who were also vying to run America's elections. Many were seeking to be governor, secretary of state and attorney-general, officials that play a role in overseeing and certifying votes. Their embrace of Donald Trump's "Big Lie", that he actually won the 2020 presidential election, bought them the former president's endorsement, which carried them through their primaries. If they had won in swing states this week, principled Republicans who resisted Mr Trump's pressure campaign in 2020 would be replaced by partisans likelier to back a similar one in future.

In many cases, voters decided that would be a bad idea. Doug Mastriano, who was not only present at the Capitol on January 6th 2021, but also paid to transport protesters to Washington, DC, lost his bid to be governor of Pennsylvania. In Michigan, voters rejected election-denying candidates for governor and secretary of state.

True, many election-denying incumbents won re-election. And some high-profile races remain too close to call. Kari Lake, who has become a kind of warrior-icon for election-deniers, may yet win the governorship in Arizona. Mark Finchem, a

How the polls performed

US, Democrats' poll margin relative to vote margin, percentage points
Selected states



Source: The Economist

Tribal sovereignty

Kid gloves

NEW YORK

Native-American children come before the Supreme Court

DARYLE CONQUERING BEAR CROW was 11 when his grandmother died and his mother turned to alcohol. Social workers in Colorado removed the boy from her care. The state refused to send Daryle to his father on the Pine Ridge reservation in South Dakota—too far, they said. So the member of the Oglala Sioux tribe shuttled through group homes for six years. Now aged 35, he says the decision inflicted needless pain. Family and culture were “ripped away”.

Daryle’s path may have been smoother had a law governing Native-child custody cases been properly applied. The Indian Child Welfare Act (icwa) prioritises placing Native children in Native homes. The idea, Congress noted upon its enactment in 1978, was to stop a “white, middle-class standard” from dictating care decisions. The icwa impels states to place kids with family when possible and to honour cultural connections. Now the law is in jeopardy. On November 9th the Supreme Court heard arguments in *Haaland v Brackeen*, a consolidation of four lawsuits targeting it.

Congress passed the icwa to rectify a history of Indians’ forced removal from their families—at government boarding schools and by overzealous social workers. Studies from the 1970s showed that 25–35% of Indian children were being separated from their communities, often because poverty or child-rearing by extended family were misinterpreted as neglect.

States seeking to remove Native children from their parents must go to greater lengths to prove that they are at risk of harm than what is required for non-Native kids. And states are expected to offer rehabilitation services to Native parents before terminating custody. The icwa empowers tribes to intercede in custody cases and place the child with extended family, unrelated tribal members or, as a last option, Indians of any tribe.

Compliance with the icwa has been spotty, as Daryle’s experience shows. In 2013 the American Civil Liberties Union sued officials in one county in South Dakota where the state had removed Native children in every custody dispute. Still, removals have fallen and family placements have increased. For all children, those in “kinship” care fare better than those sent to live with strangers in the foster system.

At the Supreme Court hearing, lawyers representing non-Native adoptive parents and the state of Texas depicted the icwa as

congressional overreach and as racial discrimination in violation of the 14th Amendment’s promise of equal protection. The law fails to protect the “best interests of the child”, Matthew McGill said, by plucking kids from foster families with whom they have bonded.

In response, lawyers on behalf of the federal government and tribes noted that Congress enacted the icwa to prevent Indian children from “being torn from their families and tribes”. Indian tribes have been regarded as “political”, not racial, entities “from the beginning” of the republic, one lawyer noted. The arrangement is written into the constitution and has been recognised in decades of precedent.

Four justices, including Neil Gorsuch, typically a staunch defender of tribal sovereignty, seemed unpersuaded by the attack on the icwa. Justice Elena Kagan criticised Judd Stone, Texas’s lawyer, for peppering his brief with what Justice Gorsuch had called “policy arguments” against the law rather than persuasive legal con-

tentions. Isn’t care of Native children “Congress’s judgment”, she asked, that the court is “supposed to respect”? Justices Amy Coney Barrett and Brett Kavanaugh had sceptical questions for both sides; it is not clear if either will provide a clinching fifth vote to save the law.

The icwa’s opponents focused on the law’s provision placing children with other tribes if no adoptive families could be found among their own. Mr Gershengorn admitted that shipping children from Maine to Arizona, just to keep them in a tribe, would pose legitimate concerns. But he observed that no such outrageous examples exist “in the real world”. The court may trim that provision rather than strike the law entirely.

Erasing the icwa would move standards for Native children’s care in the opposite direction to those for all other youngsters, notes Marcia Yablon-Zug of the University of South Carolina. Child-welfare policies have prioritised extended family and community considerations. ■

Bike protesters

Pedal to the metal

CHICAGO

Two-wheeled activists are getting louder in their demand for safer streets

AS PROTESTS GO, few are as good-natured as those led by Bike Grid Now, a Chicago-based group of cyclists. On one held early in the morning of October 26th, three dozen or so cyclists gathered outside the Loop, Chicago’s downtown, before cycling together to Daley Plaza, next to City Hall. Riding various sorts of bicycles—from the basic bikes of the city’s “Divvy” hire scheme to electric ones with child seats—

they cycled around the block, spreading across all three lanes, before pausing outside the entrance to block car traffic. After a police officer, who was also on a bicycle, politely told them that they had five minutes before he would have to arrest them, they rang their bells and chanted demands for bike lanes. A few minutes later the group, made up largely of 30-something white professionals, dispersed to their jobs ►



Wheels of change in the Windy City

► in the nearby offices.

Such protests now happen in Chicago almost weekly. The Windy City has at least half a dozen groups demanding more safety for cyclists. In September, on "World Car Free Day", several hundred cyclists staged a "die in", blocking an eight-lane highway that runs alongside Lake Michigan. An even larger group has cycled around the Jane Byrne interchange, a highway junction that is normally among America's most congested roads (and off-limits to cyclists). Similar protests have been held in cities including Oakland in California, Portland in Oregon and Miami, Florida.

Bike activism is hardly new. The freeway trespass was organised by Critical Mass, a movement that emerged in San Francisco 30 years ago. Yet the pace has accelerated, largely thanks to trends unleashed by covid-19. Though official data suggest fewer people are cycling to work (and only around 0.5% of Americans do so) than before the pandemic, reversing what had been a long, slow rise, that is probably because more are working from home. In reality, more cyclists are probably on America's roads than ever. Bicycle sales have soared—electric bikes outsold electric cars last year—and municipal cycle-hire schemes in New York, Chicago and elsewhere recorded more users than ever this past summer.

As more people are getting on bikes, they are also realising how unsafe many American streets are. Though bike lanes are proliferating in many cities, they are still rarely protected or enforced. The rise in protest is "because of tragedies", says Courtney Cobbs, an activist in Chicago. In June Elizabeth Grace Shambrook, a three-year-old girl, was killed when her mother was knocked off her bike by a lorry driver who ignored her as she tried to get round a van parked illegally in a bike lane.

In 2020, 1,260 people nationwide were killed in crashes on bikes, a 44% increase on a decade before, according to the National Safety Council, a non-profit group. Some of that increase may be because more bikes are on the roads, but it also seems likely that people are driving more dangerously, too. Last year almost 43,000 people were killed in car crashes of all sorts, the highest figure since 2005.

Christina Whitehouse, who set up a website, Bike Lane Uprising, to report people who park in Chicago's bike lanes, says the site has been inundated with such reports. But she thinks cyclists are making at least a little headway in forcing change. The city has, for example, put concrete barriers in some bike lanes to stop drivers from entering them. Ms Whitehouse says officials did this in response to protests. "There are so many bikers who are becoming single-issue voters," she says. They may be starting a virtuous cycle. ■

Year of the rat

Hamelin on the Hudson

NEW YORK

Eric Adams, New York's Pied Piper, declares war on rats

ASIDE FROM the Statue of Liberty and the Empire State Building, is there a more quintessential image of New York than a rat carefully, nay heroically, carrying a slice of pizza down some subway stairs? The horror and admiration of New Yorkers sent footage of "Pizza Rat" viral in 2015. Little admiration has been directed at rats of late. Rat sightings, as reported to the city's 311 customer-service number, rose by more than 70% in the first nine months of the year against the same period in 2020. Eric Adams, the mayor, said recently his administration will make the Big Apple liveable by "fighting crime, fighting inequality, fighting rats".

Mr Adams and Jessica Tisch, the Department of Sanitation commissioner, have a plan to end rodents' "all-night, all-you-can-eat-buffet". Rubbish, now left on the curb for up to 14 hours, will be picked up within four. After all, Ms Tisch says, "rats don't run this city, we do." The city has hired McKinsey, a consulting firm, to study scalable rat-proof trash containers. "People think it's so easy, 'why not copy and paste Barcelona [which has underground containers]?' says Ms Tisch. But New York is a far denser city, so more trash below its streets would compete for space with sewers, fibre-optic cables and the subway. Mr Adams will soon announce more anti-rat schemes.

Last month the city council passed a rat pack(age) of bills, which includes designating areas with high infestation as mitigation zones, allowing targeted rodent management. Another bill re-

quires the use of licensed exterminators as a condition for construction permits. "They may be our neighbours, but they are not our friends," says Shaun Abreu, who co-sponsored the package. "If we don't take the war to them, they'll take it to us." Some New Yorkers have taken matters into their own hands. One long-established group of rat vigilantes, called the Ryders Alley Trencher-Fed Society (RATS), hunt the vermin with their dogs.

But all these efforts may not be enough. Controlling rats will require everyone who lives or works in the city to play a role. Therein lies the problem, says an urban rodentologist. "One bad property-owner on a block of ten beautiful homes can cause the entire block to experience sightings of rats." Rats take advantage of weakness.

They are tenacious and bold. They eat what people eat, be it pizza or caviar. They can squeeze through a hole the size of a coin and can fall five storeys without injury. They chew through pipes and cinder blocks and gnaw on wires. And rat puns aside, rats are no joke. They carry disease and parasites. A Columbia University study in 2014 found that New York City rats carry 15 pathogens and 18 viruses never seen before in the city.

As bad as it is, the Big Apple is not the worst. Chicago has been America's rattiest city for eight consecutive years, according to Orkin, a pest-control company. New York, which ranks second, can only hope that Mr Adams lives up to his new moniker, "the Verminator", to ensure a happy twist in the tail.



Branching out from pizza

Lexington | Say it ain't so, Joe

Joe Biden and his country have more to gain if he declines to run again



AFTER A LIFETIME of public service, Joe Biden defeated a sitting president and then accomplished more in two years, and more of it with bipartisan support, than few but he imagined possible. He has led his party to a strong showing, by past standards, in the midterm elections.

Now, with those elections over, the 2024 presidential campaign is beginning to obsess the political class. Mr Biden should prepare to make a painful concession, not to the Republicans but to reality—actually to two realities, one of politics and another of biology. Declaring in the months ahead that he will not seek a second term would be a historic act of leadership, a demonstration of his faith in democracy and his own best chance to receive the respect and honour he has earned.

If, as seems probable, either the House or Senate winds up in Republican hands once all votes are counted, Mr Biden's path to achieving significant legislation, always narrow, will be blocked. The rest of his term will be spent trying to keep the lights on in the federal government and in Kyiv.

Even if this White House were as creative and fierce as Bill Clinton's—and it is not—the era of triangulation, of playing one party's extreme off against the other's to achieve compromises and a distinctive presidential politics, is over. Arsonist that he was, Newt Gingrich, as speaker, nevertheless had an interest in making deals with Mr Clinton. Though tormented by his radical Tea Party caucus, John Boehner, as speaker, was, as Barack Obama said, a patriot who believed in compromise.

But polarisation and gerrymandering have hardened both party factions in Congress. The number of representatives with an incentive to find common ground has dwindled. Many House Republicans are acolytes of Donald Trump, and if they secure a slender majority, the probable new speaker, Kevin McCarthy, will be preoccupied with placating Representative Marjorie Taylor Greene and the rest of the berserker caucus.

The Senate Republican leader, Mitch McConnell, is a ferocious partisan, but he is also no friend of Mr Trump, and he cares about governance. Yet several Republican senators who were also serious about governing are retiring, one to be replaced by a Democrat and five by the likes of Eric Schmitt, who as Missouri's attorney-

general tried in 2020 to overturn election results. In both Houses, Republicans will want to deny a Democratic presidential candidate anything voters might perceive as the smallest success.

By saying he would not run again, Mr Biden would not surrender political leverage so much as enhance his chance to reach at least some deals. And he would make any Republican investigations of him and his family seem like malicious irrelevancies.

Exit polls showed that voters overwhelmingly do not want Mr Biden or Mr Trump to run in 2024. His own low approval ratings, Mr Trump's weakness and the growing strength of a potential challenger like Governor Ron DeSantis of Florida all suggest Mr Biden will draw a primary challenge. Five sitting presidents in the post-war era faced serious challengers. All either bowed out (Harry Truman, Lyndon Johnson) or went on to lose the general election (Gerald Ford, Jimmy Carter, George H.W. Bush).

A challenge would distract Mr Biden and possibly make him unelectable. "It's going to be hard as it is to get anything done, but if you're going to have to move to the left to survive a primary it'll be impossible," says Doug Sosnik, who as one of Mr Clinton's chief strategists worked to prevent a primary challenge after the 1994 midterms. Back then Mr Clinton could stifle opponents by blocking access to big donors, and he also had more reason to believe he could improve his favourability rating. The internet and intensifying polarisation have changed the game.

Mr Biden is particularly vulnerable to be challenged because of the second reality: his age. He is about to turn 80. Voters know someone that old. Can they imagine that person having the vitality to run the country in this era of cascading emergencies? As a candidate in 2020 Mr Biden was lucky to be in lockdown. When he was out on the trail in the midterms, Republicans gleefully swapped clips of his gaffes and moments of confusion.

The delight Democrats took this autumn in the force and agility of Mr Obama, back on the campaign trail, stood in painful contrast to the anxiety that gripped at least some when Mr Biden opened his mouth. Even Mr Clinton, though frail, seemed faster on his feet, more able to condescend with amused confidence to the Republicans. Mr Clinton has been out of office for more than two decades. At 76 he is four years younger than Mr Biden.

His own infrastructure project

It is poignant. Mr Biden was never one of his party's great communicators. But he was among the happiest of its warriors—not just brave but cocky, talking himself into a hole and then, grinning, right back out again. Glimmers of that joyful and even overwhelming presence still come through. But not enough of them.

The midterm results affirm the role Mr Biden envisioned for himself in 2020, as a bridge to a rising generation of leaders. The country wants to move forward, to discard the nihilistic tenets of Trumpism—election denial in particular—and Mr Trump, too. By declining to run, Mr Biden would concentrate the public glare on Mr Trump's egotism and his party's extremism. And a wide-open Democratic contest would create space for a new Democrat to crusade against all the old ways, including the spectacle of bipartisan inanity that looms in Washington.

America could do with a demonstration of grace and wisdom in public life, and Joe Biden is the man for the job. He has the chance, while in office, to transcend the political mosh pit and vindicate his project to save democracy as a principled, not partisan, undertaking. He can liberate himself to be what biology and politics are making him, and what America needs—an elder statesman. ■



Nicaragua

A one-family state

Sham municipal elections have consolidated the dictatorial rule of Daniel Ortega

THEY WERE to be a “civic fiesta”, said Brenda Rocha, the boss of Nicaragua’s electoral council. Instead, Nicaragua’s municipal elections on November 6th were a farce. The ruling party, the Sandinista National Liberation Front, took control of all 153 municipalities, after capturing the remaining 12 that were run by other parties. Nicaragua is now, in effect, a one-party state. Some would say one-family.

The election tops off years of creeping authoritarianism in the country, which is run by President Daniel Ortega, a former Marxist guerrilla, and Rosario Murillo, his wife and vice-president. Mr Ortega became president in 1979, after taking part in a revolution against the last of the Somozas, a kleptocratic dynasty with American backing which had ruled for 43 years. Mr Ortega lost an election in 1990 and stepped down. Since coming back to power in 2007, he has vowed not to lose it again.

On returning to office he cosied up to businessmen and won over the Roman Catholic church with one of the world’s strictest abortion bans. Between 2008 and 2015 Nicaragua bought \$4.5bn of Venezue-

lan oil at discounted prices. The proceeds from selling it were funnelled into banks owned by the ruling party and lavished on Mr Ortega’s supporters. The economy grew on average by 5% a year between 2010 and 2017. The share of people living on less than \$3.20 per day fell from 27% in 2005 to 10% by 2017. With potential critics silenced or bought off, Mr Ortega took over all branches of the state. The Supreme Court (widely considered to be controlled by Mr Ortega) abolished term limits and expelled the leader of the opposition and 16 of his supporters from Congress.

More recently the regime has become bloodier and more brazen. When students and pensioners peacefully protested against the government in 2018, police and Sandinista goons killed over 350 people. Before a general election last year, in which Mr Ortega won a fourth consecutive term, all seven opposition presidential candidates were locked up. Some 219 students, journalists and human-rights defenders are behind bars. Many are in El Chipote, a torture prison in Managua, the capital. A former revolutionary commander turned

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critic died in February after being denied medical help. Many prisoners are in solitary confinement. Some have been starved.

Mr Ortega and Ms Murillo have even gone after the Catholic church. In the past six months the government has locked up 11 priests who denounced human-rights abuses. One bishop was put under house arrest after Ms Murillo claimed he had committed “crimes against spirituality”.

At least 2,000 NGOs and 50 independent media outlets have been shut down recently. In the week of the municipal elections 31 people were arrested, according to Urnas Abiertas, a civil-society group. It also reckons that over 80% of Nicaraguans did not bother to vote. Instead, they are voting with their feet. In a recent survey by CID-Gallup more than half of Nicaraguans said they wanted to emigrate. Remittances account for 15% of GDP.

The state now looks like a family business. Of the ruling couple’s nine children, eight have posts in government or help run public companies. The only stepdaughter who does not have a plum government job is in exile because she alleges Mr Ortega sexually abused her when she was a child (he denies this). According to *Confidencial*, a Nicaraguan newspaper, the family are connected to at least 22 businesses, including oil firms and property companies. The last time the first couple reported their wealth was 20 years ago, when they claimed to have a modest \$300,000.

So far Mr Ortega has appeared impervious to pressure. The United States and the ➤

► European Union have sanctioned several members of the ruling family as well as dozens of their cronies, including Ms Rocha. In October Joe Biden's administration announced new sanctions on the gold industry, which exported almost \$1bn-worth of the metal last year. Meanwhile the regime can no longer rely so heavily on fellow autocrats who once supported it. Venezuela and Cuba are cash-strapped. Gustavo Petro, Colombia's new leftist president, was rumoured to be hoping to mediate, but nothing seems to have come of it. The dictatorial couple are "perfectly content to be

as isolated as North Korea in order to maintain their rule," says Benjamin Gedan of the Wilson Centre, an American think-tank.

There is talk of freezing Nicaragua out of the Central American Free Trade Agreement with the United States. Inexplicably, the Central American Bank for Economic Integration, based in Honduras, has lent more than \$1bn to Nicaragua since 2018. Cindy Regidor, a Nicaraguan journalist in Costa Rica, hopes that the recent win in Brazil by Luiz Inácio Lula da Silva, a former president, will lead to a coalition of democratic leftists, together with Mr Petro in Co-

lombia and Gabriel Boric in Chile, that could try to mediate with the regime.

But the Ortegas may bring about their own downfall. Nicaraguans resent Ms Murillo's ostentatious wasting of their hard-earned cash (for example, on garish electric trees in Managua's main street.) "[She] is not someone the military takes seriously—the weak link will be in the transition from Ortega to his wife," says Ryan Berg of the Centre for Strategic and International Studies, a think-tank. The Ortegas have forgotten a lesson from their own revolution. Despotic dynasties don't last for ever. ■

Bello A new battle for the IDB

At last Latin America seems likely to find a good development banker

WHEN IN 2020 the administration of Donald Trump engineered the election of Mauricio Claver-Carone, an official at the National Security Council (NSC), as president of the Inter-American Development Bank (IDB) it broke a gentlemen's agreement dating back to the bank's founding in 1959. This held that the top job should go to a Latin American while the United States, the largest shareholder with 30% of the capital, would have the number-two slot and informal vetoes. Mr Claver-Carone vowed to shake up what he claimed was a fossilised institution. Yet his appointment always looked like an accident waiting to happen, especially after Joe Biden won the White House. So it proved.

Born and brought up in Florida, he had little knowledge of Latin America. At the NSC he had repeatedly pushed for the United States to invade Venezuela to topple Nicolás Maduro's dictatorship, against cooler heads at the Pentagon. At the IDB he alienated the biggest Latin American shareholders by appointing little-known people from small countries to the top jobs. He stressed helping the private sector and trying to block China. He often sounded like a simplistic cheerleader for the United States.

He was the agent of his own downfall: the IDB's executive directors voted unanimously to sack him in September, after an investigation found that he had violated the bank's code of ethics by having an affair with his chief of staff, whose salary he had increased. (He denied the affair; the investigators said he failed to co-operate with them.)

He won the post partly because Jair Bolsonaro's government in Brazil was an ally of Mr Trump's, but also because Latin American governments failed to unite behind a plausible alternative. Granted

an early opportunity to make amends, this time the region has floated several well-qualified contenders before nominations close on November 11th. Whoever wins faces two big tasks. The first is to pep up the bank's staff, demoralised under Mr Claver-Carone. The second is to secure shareholder agreement for an overdue increase in the bank's capital, to enable it to expand its lending.

Many governments said they favoured a woman. Mexico's president, Andrés Manuel López Obrador, proposed Alicia Bárcena, who ran the UN Economic Commission for Latin America from 2008 until April. In that post she favoured the failed industrial policy of left-wing governments such as that of Rafael Correa in Ecuador, and praised the dictatorships of Cuba and Venezuela. Her candidacy stalled and on November 9th she withdrew. Mexico instead proposed Gerardo Esquivel, the deputy governor of the Central Bank.

Laura Chinchilla, a former president of Costa Rica, is widely respected except, it seems, by Rodrigo Chaves, the current occupant of that job, who refused to nomi-

nate her. Mr Bolsonaro's government has proposed Ilan Goldfajn, a former head of Brazil's Central Bank who is currently the IMF's top official for Latin America. But Luiz Inácio Lula da Silva takes over on January 1st from Mr Bolsonaro. According to a well-placed source, Lula's people do not oppose Mr Goldfajn. But it is not clear how hard they will lobby for him.

That may favour Chile's candidate, Nicolás Eyzaguirre, a former finance and education minister who once held Mr Goldfajn's job at the IMF. He has the advantage of having worked for centre-left governments in his country in a region that currently tilts in that direction. Another potential nominee is Augusto de la Torre, a former boss of Ecuador's Central Bank and World Bank economist. Argentina is keen to bag the job. It may propose Sergio Massa, who became economy minister in August. A conservative Peronist, he has good connections in Washington. Against him is that Argentina is likely to be a big supplicant for IDB money. He is not easy to replace in his current post. But Bello's sources say he wants to run.

Mr Claver-Carone was right that the IDB suffers from a degree of cronyism and feather-bedding. But it is still important for Latin America. Its annual lending of around \$14bn is almost matched by that of CAF, another development bank. But the IDB can be swift and flexible in its loans, which matters as financing conditions for governments tighten. And it has much expertise in advising governments on projects and policies, such as reforms of tax and spending. Calm, competent and politically astute leadership at one of Latin America's key institutions would help the region at a difficult juncture. This time there is a good chance of getting that.





Israel's new government

Changing the nature of democracy

JERUSALEM

A coalition government may include some unprecedently dodgy bedfellows

FORMING A GOVERNMENT in Israel is always a messy affair. Thanks to the country's extreme proportional-representation system for elections, no party has ever won an outright majority in the Knesset, Israel's parliament. Intense haggling between the prospective prime minister and the parties wishing to join a coalition always follows an election. In the words of Yitzhak Rabin, an Israeli prime minister assassinated by a Jewish supremacist 27 years ago this week: "In every coalition there's also some loathing." His adage rings true today.

Some of the parties hoping to form a coalition government with Binyamin Netanyahu's Likud party, which won easily the most seats in an election on November 1st, are widely loathed. The most prominent is Itamar Ben-Gvir (portrayed above left), the leader of the Jewish Power party within a far-right bloc called Religious Zionism. He once declared, when Mr Rabin was prime minister, that he would "get to him".

A co-leader of the bloc, Bezalel Smotrich, used the annual memorial for Rabin's murder to air an old conspiracy theo-

ry that Israel's security service had "encouraged" the assassination. A third would-be coalition partner heads a party that is fiercely homophobic. Religious Zionism is now the third-largest group in the Knesset. Mr Netanyahu, Israel's longest-serving prime minister, who is anxious to return to power after 17 months in opposition, needs it to secure a majority.

Liberal Israelis are horrified by the prospect of Mr Ben-Gvir in government. He once led the youth wing of a virulently anti-Arab movement known as Kach, founded by an American-Israeli rabbi, Meir Kahane. From 1988 it was barred from running in Israeli elections. In 1994 it was banned by the government as a terrorist organisation. Mr Ben-Gvir has rebranded Kach as Jewish Power, toning down its rhetoric a tad. Instead of chanting "Death to the Arabs", his disciples are now instructed to chant "Death to the terrorists". "Ben-Gvir is still inspired by Kahane and thinks like him," says Tomer Persico, an expert on Jewish radicalism at the Shalom Hartman Institute in Jerusalem. "The

question is whether he can put that ideology into practice."

At the top of Mr Ben-Gvir's list of conditions for joining the government is that he be appointed public-security minister in control of Israel's police. Should Mr Netanyahu grant him that post, already tense relations with Israel's Arab minority, which numbers about a fifth of the population, could further deteriorate. A frequent flash-point is Jerusalem's Temple Mount, where some Jewish radicals, including Mr Ben-Gvir, want to scrap the rules that prohibit Jews from praying beside the al-Aqsa mosque. Clashes there between Palestinians and the Israeli police have led in the past to violence that has spread across Israel and the Palestinian territories.

Religious Zionism also hopes to pass an "overriding" clause that would let the Knesset countermand court rulings. That would weaken the Supreme Court's power to block government actions and laws that curtail human rights. This change is also backed by ultra-Orthodox parties bidding to join a governing coalition under Mr Netanyahu. They have their own additional demands, including more funds for religious schools that do not teach "secular" subjects like mathematics.

Despite his nationalist language and sniping at the courts, Mr Netanyahu in previous stints in office has refrained from rehashing the legal system. Nor has he tried to change the status quo on the Temple Mount. His previous coalitions have in-►

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cluded parties to the left of Likud to give himself wriggle room to avoid meeting the demands of parties to his right.

This time round he may be more beholden to the far right. So far no parties to his left will agree to join a coalition led by him. The two leaders of parties of the centre, the outgoing prime minister, Yair Lapid, and the defence minister, Benny Gantz, have flatly ruled out serving under a prime minister facing corruption charges, which Mr Netanyahu has battled for two years. He may by instinct lean towards a more pragmatic type of coalition, as in the past, but the far-right and religious parties are the only ones which, for the moment, will guarantee him his majority.

Moreover, they might well help pass legislation that would end his trial for bribery and fraud. "Netanyahu always ran populist campaigns, but once elected usually governed as a pragmatist," says Gayil Talshir of Jerusalem's Hebrew University. "But now, because of his trial and the coalition he's about to form, we may indeed be about to see populism in power."

It is not just his desire to evade justice that makes it trickier for Israeli centrists to deal with Mr Netanyahu. His party has shifted further to the right, too. Likud was always staunchly nationalist but in the past it has respected Israel's courts and shunned Rabbi Kahane's racism. Nowadays, however, most of Likud's representatives support an alliance with Jewish Power and sound happy to curb the courts.

Voces on the centre and left are urging Messrs Lapid and Gantz to join a government with Mr Netanyahu as the lesser of evils, to keep out the far right. So far they are refusing to do so. Meanwhile, liberal democracy in Israel is under threat. ■

Israel and Palestine

Welcome back to the occupation

DUBAI

A Netanyahu government may raise the temperature in a boiling West Bank

A WEEK BEFORE Israelis went to the polls on November 1st, a team of Israeli soldiers carried out an unusual raid in the old city of Nablus. By day its casbah is a lively place, famed for its sweets. But in the pre-dawn hours of October 25th it was a war zone. Five Palestinians were killed and dozens injured. Another Palestinian was killed in a different episode that evening.

The target was a new armed Palestinian group called the Lions' Den. It has claimed responsibility for a string of attacks on Israeli soldiers in the Israeli-occupied West Bank, which Palestinians see as the future



Mounting rage

core of an independent state. Israeli police say they also foiled a planned attack by the Lions in Tel Aviv in September. The raid, which followed weeks of restrictions on Nablus residents, felt reminiscent of the Palestinians' bloody *intifada*, or uprising, two decades ago. In recent years Israeli soldiers had rarely entered the old city, let alone fired off shoulder-fired missiles in the middle of town.

The West Bank is boiling. The United Nations says that this year is likely to be the deadliest for Palestinians there since 2005. Israelis say they had to respond to an upsurge of Palestinian militancy in March and April, when attacks occurred in four different cities in Israel. A government led by Binyamin Netanyahu, especially if it includes the far right, may raise tensions in the West Bank further.

Yair Lapid, the outgoing prime minister, was hardly a dove. Though he endorsed the two-state solution at the UN General Assembly in September, he made no effort to end the conflict during his four months in office. In the first ten months of this year at least 109 Palestinians, including 28 children, have been killed by Israeli soldiers in the West Bank, a 40% increase on the tally for the whole of 2021.

Violence by Jewish settlers against Palestinians in the West Bank, much of it unpunished, has been rising too. The UN has recorded 577 attacks this year, up from 496 in 2021. Mohammed Shtayeh, the Palestinian prime minister, describes the contrast between Israeli governments as the "difference between Pepsi and Coke".

Still, a Netanyahu coalition with the far right could add fuel to the fire in several places. First is Jerusalem. Itamar Ben-Gvir, a co-leader of the far-right Religious Zionism bloc that hopes to team up in government with Mr Netanyahu's Likud party, wants to be minister of public security, in

charge of the police. Some far-right activists hope this will mean changes on the Temple Mount, Judaism's holiest site, which is also sacred to Muslims and a symbol of Palestinian national identity.

Those activists may be disappointed. In the past Mr Netanyahu has been cautious about changing the status quo on the plateau, where Jews are forbidden to pray openly and face restrictions on when they may visit. Even if the rules do not change, though, a visit there by Mr Ben-Gvir, whom Palestinians revile, could touch off riots.

For their part, Palestinians have lost faith in the Palestinian Authority (PA), which governs parts of the West Bank under Israel's eye. Mahmoud Abbas, its 86-year-old president, took office for a four-year term in 2005 and never left. A survey in September found that 74% of Palestinians want him to resign and 46% want to dissolve the PA altogether.

Younger ones, in particular, see little reason to trust their ageing leaders. Some members of the Lions' Den come from families linked to Fatah, Mr Abbas's party. Ibrahim al-Nabulsi, one of its founders who was killed in an Israeli raid in August, was the son of a PA intelligence officer.

During his previous 12-year stint as prime minister, Mr Netanyahu undermined the PA. He periodically withheld the tax revenues that Israel collects on its behalf, starving the authority of funds. He had no interest in peace negotiations; in 2020 he promoted a plan for Israel to annex chunks of the West Bank. If he weakens the feeble PA still more, the territory could slide towards anarchy.

Israel has imposed a blockade on Gaza, the other bit of a would-be Palestinian state, since 2007, when Hamas, a militant Islamist group, took control. Egypt, which borders Gaza, also keeps tight restrictions on it. Many Israeli security officials argue it is time to rethink the embargo, which has not dislodged Hamas from power but has brought misery to Gaza's 2m people.

Israel's outgoing government did offer a few small gestures toward Gaza's battered economy. It more than doubled the number of permits for Gazans to work in Israel, to 17,000. Mr Lapid had hoped to raise it to 20,000. That is a small fraction of the 100,000 Gazans who worked in Israel before Hamas took over. Still, it offered some relief to thousands of families. The median wage in Gaza is 33 shekels (\$9) a day; Palestinian labourers in Israel can earn 266.

Successive Israeli governments have shown little interest in lifting the blockade of Gaza. Mr Netanyahu is likely to retain it—and is certain to clobber Hamas as fiercely as ever in any future conflict. Whatever the shape of the new Israeli government, it will bring little comfort to the Palestinians, whether in a blighted Gaza or a seething West Bank. ■

Egypt

Good COP, bad cops

CAIRO

The host of the climate-change summit persecutes environmentalists at home

THE CLIMB up the holy mount seemed innocuous enough. On the side of the UN's annual climate conference this week in Egypt's Sinai peninsula, a few dozen religious leaders from India to Indiana planned to pray on its summit for forgiveness for the harm humanity has been inflicting on Mother Earth. Egypt's local military governor gave the idea a cautious welcome, hoping it might boost tourism. But his masters in Cairo were taking no chances. The bus companies and hotels were told to cancel their reservations. Security men grabbed the local fixer, took his phone and sifted it for names to put on the state's blacklist. "They want to control us," says an organiser, who has moved the Earth-propitiating event to London instead.

As climate pundits and politicians fly into the Sinai resort of Sharm el-Sheikh from all over the world to attend COP27, Egypt's rulers are intent on cordoning off their own environment from the debate. They have sharply restricted permits for Egyptian NGOs, installed cameras in taxis to quieten Egypt's talkative drivers, and swamped the floor of the supposedly uncontrolled zone with plain-clothes security men wearing lapel pins. And across the country they have locked up activists seeking to hold the authorities to account for wrecking Egypt's environment.

Egyptians have a long history of protesting against environmental disasters. Prophets and peasants blamed the pharaoh for biblical famines and plagues. More recent campaigners lambasted the government of President Hosni Mubarak for approving an ammonia factory in their coastal town of Damietta—and won. And after the Arab uprising of 2011, when Mubarak was overthrown, thousands of Egyptians protested against the building of nuclear reactors, coal plants in residential areas and motorways that tore through their neighbourhoods. After the country's top general, Abdel-Fattah al-Sisi, seized power in 2013, he smothered environmental dissent and pursued whatever mega-projects he fancied. "The worse the environmental damage, the greater the silence," says an Egyptian activist, who, like all his ilk, requests anonymity.

The greens certainly need to cry out. By 2030, according to official estimates, rising sea levels may cut agricultural output in the low-lying delta, Egypt's breadbasket, by 30%. Farmers already report falling har-

vests as salty water seeps into their fields.

But environmental groups say they cannot conduct fieldwork or raise awareness. They face the same curbs as NGOs in other spheres. Protesters are absurdly labelled "terrorists" and jailed. Restrictive laws have tightened. The punishment for receiving foreign funds, which many green groups need to survive, has been amended to include sentences of death or jail for life. "There's no activism any more," laments an Egyptian environmentalist.

It is unclear how many of Egypt's estimated 65,000 political prisoners are green activists, say human-rights groups. But their number includes several prominent environmentalists. Ahmed Amasha, who helped orchestrate the Damietta protests and set up the Arab Association for Environment and Sustainable Development to train activists, has spent four of the past five years in prison. His testicles have been electrocuted and his left ribs broken, says his family. "There's no more respect for environmental rights than for any other in Sisi's Egypt," says Mohamed Amasha, the activist's son, who lives in America.

With silence ensured, Mr Sisi's bulldozers have speeded up the browning of green spaces in a country where 95% of the land is desert. Earlier this year he authorised the army to develop 37 islands, mostly in the Nile, that had previously been designated as conservation zones. Construction has already begun on Tawila island, off the Red Sea coast. The security forces have also begun clearing al-Warraq, a Nile island that was one of the largest green spaces remaining in Cairo, the capital.

Some Egyptian greens want the conference boycotted. "It's just greenwashing," says an exiled member of the Muslim Brotherhood, the banned Islamist group, whose government Mr Sisi overthrew in 2013. "No matter how many people are in



Don't let our own greens in

Sisi jails, he's showing that the whole world is there for him" in Sharm el-Sheikh.

But others argue that holding COP27 in Egypt still has benefits. Under the umbrella of international organisations, some dissidents have slipped through the security cordon. On November 8th Sanaa Seif, the sister of Alaa Abd el-Fattah, a prominent pro-democracy activist, held a press conference to highlight his plight, since he has been on hunger strike in prison. And Egyptian environmentalists still support Mr Sisi's case that rich countries should pay for past pollution—to the benefit of such worthy supplicants as Egypt. ■

Business in Africa

Of beer and banks

KWABENYA

A Ghanaian brewery shows how hard life is for small businesses

"**HAPPY 34TH BIRTHDAY, Tom**", exclaims the label on the beer bottle. Underneath is a photo of the birthday boy, then an employee at the American embassy in Ghana, pulling a face that suggests he was not expecting any buttoned-up diplomats at his party. Clement Djameh, a wisecracking Ghanaian brewer, makes the bespoke labels and the amber liquid inside. It is refreshing, tangy, and so strong that a second glass risks turning the afternoon into a haze. The surprise ingredient is locally grown sorghum. Mr Djameh is desperate to expand to meet demand, but his plans are badly stalled.

Those running businesses in sub-Saharan Africa, even in relatively prosperous countries such as Ghana, face a scarcely conceivable array of problems. Chief among them is access to finance. Alas, government and donor efforts to fix the problems often go awry.

Mr Djameh has many advantages for a would-be brewing kingpin. He studied beer-making in Munich and has worked for Ghana's biggest brewers. Beer-glugging foreigners love his concoctions. His microbrewery was Ghana's first. And his use of sorghum stemmed from his work on a multimillion-dollar government- and UN-backed project to reduce poverty by encouraging Ghanaian farmers to grow the grain to supply brewers. Ghana's beer barons have been sniffy about using sorghum. Mr Djameh's business offers a way to make something of the project.

To ramp up production from a mere 200 litres a batch in 2016, Mr Djameh began looking for about \$400,000 to buy bigger brewing equipment and lots more kegs. He applied for an interest-free loan under a ➤

► special scheme at a state bank and was approved, he says. But the bank then said it had no cash to lend. The cheap-loan scheme was later changed into one that charged 10% interest. That did not deter Mr Djameh, who was keen to reap economies of scale. "Breweries always make money," he grins. However, he balked when the loan officer wanted a 10% kickback, he says, adding: "If you're not prepared to pay [and] you don't have a strong political connection, you will not get the money."

Ghana's government is now broke and in talks with the IMF. The central bank has increased its main interest rate to 24.5%. Borrowing costs on commercial loans are higher still. Even a brewer would find them prohibitive. Mr Djameh's latest plan is to find parched investors wanting to buy a share of the company. Yet one of the potential financiers who is interested may bring trouble. "He is a drug dealer," chuckles Mr Djameh. "It's not really the kind of money that you want to work with."

In World Bank surveys a quarter of sub-Saharan African firms cited access to finance as their biggest obstacle. This is far higher than for other constraints.

After years trying to raise money to expand, Mr Djameh is still stuck brewing small batches. To make ends meet, he has long worked as a consultant to aid projects across Africa on how to grow sorghum and use it for brewing. Frustrated, he may focus on this work. That reveals a bitter irony: it is often not just easier, but more profitable, to work for an aid outfit promoting clever schemes to transform African economies than to build businesses that do so. ■

War in the Horn

Ending Abiy's war

A peace deal highlights the pointlessness of Ethiopia's civil war

ALMOST TWO years to the day since the first shots were fired, a pact to end Ethiopia's civil war was signed on November 2nd. Hundreds of thousands of people may have died from bombs, bullets or war-induced hunger and disease. The pact underlines how needless the suffering was.

The two main parties—Ethiopia's government and the Tigrayan People's Liberation Front (TPLF)—seem to have gained almost nothing. Meanwhile, millions of inhabitants of Tigray, a region in the north, and many in the adjoining regions of Afar and Amhara (see map) have had their homes razed and their crops burned. Wide areas have been ethnically cleansed. Countless women have been raped.



The peace deal called for an immediate halt to fighting between forces loyal to Abiy Ahmed, Ethiopia's prime minister, and those supporting the TPLF. The parties also promised an unhindered flow of aid. That will offer relief to the 5m-6m civilians in Tigray who have been under blockade by government forces for most of the war. Hundreds of thousands are starving. António Guterres, the UN secretary-general, called the deal a "welcome first step" which ought to "bring some solace to...millions of Ethiopian civilians".

The agreement goes much further than a simple ceasefire. It sets a blueprint for future relations between Tigray and the federal government, whose "constitutional authority" over the region is to be restored. Federal troops are to enter Mekelle, the region's capital, and Tigrayan forces are to be demobilised within 30 days.

The government will lift its designation of the TPLF as a terrorist group. An "inclusive interim" administration will govern the region until elections are held. In effect that will mean the dissolution of the TPLF-led regional government, elected in September 2020 in defiance of a federal government edict. It was this election that set the country on its path to war three months later when Abiy, furious at Tigray's defiance of federal authority, massed troops on the region's borders. This prompted a pre-emptive strike by the TPLF.

Many Tigrayans think the deal amounts to a surrender. They witnessed months of murders, rapes and forced starvation in their homeland the previous time federal troops occupied it. Disbelief is palpable among those who left. "Shock, indignation, denial, condemnation, the whole package," says one living elsewhere in Ethiopia. "There's a huge demand for the TPLF to publicly explain the deal." Its leaders have tersely claimed they defended Ethiopia's constitutional order.

Their reluctance to say more may be because they expect a backlash. For months the TPLF's top brass had insisted that their forces held the upper hand in the fighting.

TPLF leaders had also promised not to concede any of their "non-negotiable" demands, which included the withdrawal of Eritrean troops and the return of territories annexed by the neighbouring Amhara region. In the end Eritrea, whose troops fought alongside Ethiopian government forces, did not warrant a single mention in the agreement. The status of the "contested areas", meanwhile, is to be resolved "in accordance with the constitution" (some think that could mean a referendum) at an indeterminate point in the future.

That it gave up so much is probably a reflection of the TPLF's weakness on the battlefield and the suffering of Tigrayan civilians under the blockade. But some still think it caved too soon. One former Ethiopian diplomat reckons it made "too many concessions", possibly because it was under pressure from America.

Speaking at a rally in southern Ethiopia on November 3rd, Abiy proclaimed "victory", and crowed that "100%" of his side's proposals had made it into the final agreement. One of his close advisers, an Orthodox Christian preacher who last year called the TPLF a "weed" to be wiped off the face of the earth, drew comparisons to the battle of Adwa, when Ethiopians from all corners defeated Italian invaders in 1896.

Officials in the finance ministry hope that the deal will lead to the swift resumption of a much-needed IMF programme to save Ethiopia's war-wrecked economy and unlock further donor funds for reconstruction. Yet that will depend on the ceasefire holding and the successful implementation of the peace agreement. In theory, the African Union, which convened the talks, is to act as guarantor. But it lacks teeth. "We have to see what happens on the ground," says Mikiale Teklu, a Tigrayan now living abroad. "But I don't believe Abiy Ahmed."

Once more unto the next breach

Even if this deal marks an end to the war with Tigray, other conflicts still fester in Ethiopia. Abiy faces opposition from many in Amhara, for instance, who say they were not represented in the talks and worry that the government will eventually hand the disputed territories they occupy back to Tigray. Militias from Amhara are also at war with parts of Oromia, Abiy's home region. And Oromia itself is racked by armed insurgency. There is little reason to think Abiy's government is seriously considering talks with the rebels there.

Ethiopia's recent history is another reason to be cautious. The war it fought against Eritrea, which erupted in 1998 and within two years had resulted in perhaps 100,000 deaths, was supposed to have ended with a "cessation of hostilities" in June 2000. A peace agreement was signed within six months. It has yet to be properly implemented more than two decades later. ■

**Ukraine**

The flight from Kherson

Russia says it is abandoning a vital Ukrainian city. But is it a trap?

EIGHT MONTHS of brutal war have borne little fruit for Russia. It was beaten back from northern Ukraine in the spring. It was routed in Kharkiv province in September. Since the start of the war in February it has lost perhaps 100,000 men, killed and wounded. The only provincial capital it has managed to take is Kherson city, captured in the first week of war and illegally annexed in September. And now that, too, seems to be slipping from its grasp.

On November 9th Sergei Shoigu, Russia's defence minister, and General Sergei Surovikin, appointed as the commander of Russian forces in Ukraine weeks earlier, met Russian commanders and acknowledged that Russia's position in Kherson had become untenable. The "most sensible option" in the circumstances, said General Surovikin, would be to establish a new defensive line on the eastern side of the Dnieper river. "Sergei Vladimirovich, I agree with your conclusions and suggestions," replied a stony-faced Mr Shoigu. "For us, the lives of Russian servicemen are always a priority."

Russia's position in Kherson has been

deteriorating for months. Ukrainian forces launched a ground offensive in the province on August 29th, after weeks of precision attacks against the bridges needed to resupply Russian forces on the west bank of the Dnieper, where Kherson city lies. In early October Ukrainian troops made breakthroughs in the northern part of the front, eventually bringing the front line to within 30km of the city. By the end of the month Russian authorities said they had completed the evacuation of over 70,000 civilians to the east bank.

Ukrainian officials are sceptical that Russia is really prepared to withdraw without a fight. Many of them fear that the an-

nouncement is simply a ruse, intended to lure their army into urban combat. Mykhailo Podolyak, an adviser to Volodymyr Zelensky, Ukraine's president, said on November 9th, after the Russian declaration, that "We see no signs that Russia is leaving Kherson without a fight." One source familiar with Russian operations said that, despite this understandable scepticism, there was increasing evidence that the withdrawal was for real.

Certainly, Ukraine will not rush into the city. But it is clear that the noose has been tightening. On the same day the head of Russia's puppet regime in Kherson acknowledged that Kirill Stremousov, his deputy, had been killed "in a car crash". Numerous pro-Russian officials have died in recent months, many of them assassinated by Ukrainian partisans and special forces.

A withdrawal, if it really happens, would be humiliating both for Russia's army, which is being steadily pushed back, and for Mr Putin, who declared Kherson to be an inalienable part of Russia just weeks ago. "Russia is here for ever," declared Andrei Turchak, secretary of United Russia, the Kremlin's ruling party, speaking in Kherson in May. "There will be no return to the past." Ramzan Kadyrov, the leader of Chechnya and lately a critic of the Kremlin's war strategy, praised General Surovikin for a wise decision that had saved lives. But others were less forgiving.

On Telegram, a social-media forum popular among war commentators in Russia, "nationalist patriots" were furious. ➤

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► Yevgeny Prigozhin, an ex-convict who controls Wagner, a group of mercenaries, compared the situation in Kherson to the rout in Kharkiv: "Then too, there was no understanding of what was going on." He cited one of his commanders as saying that Wagner would stay even if the army left. The Telegram channel "Operation Z", which has a million subscribers, wrote: "Fuck, why were we lied to?" There is also mounting anger at Russia's recent mobilisation of some 300,000 more men. The wives and mothers of new recruits are travelling to the Russia-Ukraine border to demand that their husbands and sons be withdrawn.

On state television, retired generals offered the theory that the retreat was temporary. In truth, any lingering Russian hopes to advance, once more, on Mykolaiv, and thence westward to Odessa, have receded into fantasy. The retreat has some advantages. It allows Russia's army to narrow the front and establish more defensible lines, as it waits for the newly mobilised recruits to arrive—indeed one official suggests that the withdrawal from Kherson and a switch to the defensive might have been one of General Surovikin's conditions for taking the top job. But it also brings parts of Crimea, which Russia annexed in 2014, within range of longer-range rocket artillery, notes Rob Lee of King's College, potentially playing havoc with Russian railway stations, ammunition depots and other facilities there.

The withdrawal itself is yet to come. A retreat under fire—a "retrograde under contact", in military parlance—is one of the most challenging tasks that any army can undertake. It can go horribly wrong; Russian forces suffered heavy casualties as they escaped from Lyman a month ago. Western and Ukrainian officials said in October that around 20,000 Russian troops

were deployed on the western side of the Dnieper. Many are probably still there.

If Russia's perimeter around Kherson city collapses, Ukraine will swiftly be able to bring its artillery forward, to within range of the bridges, pontoons and barges that represent the only escape route for Russian troops on the western side. These could then become death traps. Russia may anyway have to abandon or destroy large amounts of military equipment, since some bridges, damaged by months of relentless bombardment, cannot bear the weight of heavy vehicles. Some suspect that Russia may resort to human shields, mingling civilian and military traffic to deter Ukraine from striking.

General Surovikin also hinted at another terrifying possibility. He warned Mr

Shoigu that Ukraine's armed forces had planned to create a flood zone below the Kakhovka hydroelectric power plant, which forms part of a 3km-long dam at Nova Kakhovka. In October Mr Zelensky, warned that Russia, in fact, had mined the dam. One aim of damaging or destroying it might be to cover the Russian retreat by bogging down Ukrainian troops.

That would be a very risky strategy. Michael Kofman of CNA, a think-tank, warns that the destruction of the dam would not only be "ecologically disastrous" but would also have a larger impact on eastern Kherson, which Russia seeks to retain, than on the western part of the province. It could also disrupt the supply of water to Crimea. "It would mean Russia essentially blowing its own foot off." ■

Ukraine

Mud wrestling

KYIV

The particular problems of fighting in the autumn

IT'S MUD season again in Ukraine. "Spring and autumn are the most difficult periods for warfare," says reservist Colonel Oleh Zhdanov, a former operations officer on the Ukrainian general staff. "The main problem is the rain." Farm tracks leading to the front lines are churned into slippery swamps, armoured vehicles founder, soldiers slip and fall and sometimes break bones. "As the temperature drops, the fighting slows down," says Colonel Zhdanov. "When roads are impassable, the war usually becomes more positional."

"The rain feels like needles on every part of your body; you are pouring water out of your boots," says Andriy, a Ukrainian unit commander in the province of Luhansk. His poncho is his most treasured piece of kit. "I love it, I could write a book about it." By day, it keeps the rain off; at night he stretches it into a canopy above his foxhole. Other soldierly essentials are a water-resistant sleeping bag, good thermal underwear ("I didn't change my clothes for two weeks; I smell really bad"), and sanitary towels, which soldiers use as insoles to keep the damp out of their boots.

Staying warm and dry is a matter of luck, says Andriy. Sometimes, digging in, he hits dry earth a metre below the surface; other times he has to spend the night with subterranean streams trickling into his sleeping bag. In the morning you can tell the unlucky ones, because they are almost comically covered in mud.

It rained almost solidly through October and several soldiers were evacuated

with flu and other ailments caused by the wet, cold conditions. For several days Andriy ran a fever and his kidneys ached. He struggled on, gulping flu-remedy drinks, but at last his commander insisted that he was evacuated. Doctors tell him he has an inflammation of his kidneys and should go to hospital; he hopes a few nights' sleep in warm and dry conditions will clear it up so that he can return to his unit.

Andriy Zholob, call sign "Concrete", commander of a medical brigade in the Kherson region in the south, says autumn ►



Pluses and minuses

► is the worst time of year for sickness. Out of 2,000 soldiers in his sector, two or three a day are being evacuated from the front with fever, flu, tonsilitis and ear infections. Since the exigencies of war have put plenty of men in their 40s and 50s on the front line, he is seeing flare-ups of conditions like rheumatism and arthritis.

The mud makes evacuating the wounded a nightmare. Last week an ambulance slipped down a verge into the river (no one was hurt). "And mud [can transmit] infection," says Mr Zholob. Tetanus cases have spiked. "If a wounded soldier has to wait four or five or six hours to be evacuated, little wounds can become big problems."

The rain is bad, but the loss of leaf cover affects soldiers on the battlefield the worst. Andriy and his unit have been "on raid", pushing the Russians farther back after the successful counter-offensive around Kharkiv in September, under almost constant shelling. "When it's green you can hide," he says. "Now with no leaves, it's almost impossible. The Russians have a lot of drones. When you realise that they are looking at you right at that moment, I feel fear. If they see even only two people, they will begin shelling the area."

Tactics change. "When the leaves fall it is possible to see the enemy [from farther away] and observe him more closely," says Colonel Zhdanov. "Without leaf cover it is harder to move, there are fewer ambushes, battles tend to be conducted at longer distances, relying more on artillery."

Despite the weather, Ukrainian morale remains high. Fighting in Luhansk, Andriy says he is "warmed" by the thought that the newly mobilised Russians on the other side have to endure the same conditions but with worse equipment. Ukrainian front-line troops are supplied daily with hot food. From intelligence intercepts, they know that the enemy, under pressure to maintain their positions, are rarely evacuated when ill. In the spring the Russians, bogged down in the mud outside Kyiv, were not allowed to light fires and risk revealing their positions, or run the engines of their vehicles and waste precious diesel. Many got frostbite.

Every season has its advantages and disadvantages. Andriy, the unit commander, notes that mud can even be helpful: "In autumn your weapon is so obviously dirty that you clean it every day." It will get colder soon enough; freezing conditions make it harder for bacteria to thrive and easier for vehicles to manoeuvre. Says Colonel Zhdanov, "I always say that the one who prepares the targets better and equips the soldier better will have the advantage when the winter comes. When a soldier is in warm clothes, he will fight in the cold; when the ground is dry and hard he will feel comfortable. And then there will be a tendency to intensify hostilities." ■

EU fiscal policy

Hamiltonian rules

The commission wants to be in charge

A MUSICAL ABOUT Ursula von der Leyen is hard to imagine. Unlike Alexander Hamilton—America's first secretary of the Treasury, who masterminded the fiscal federalisation of the United States and was posthumously rewarded with a hit musical—Mrs von der Leyen still has some battles to win. Her latest proposal to make the European Commission that she runs a more political arbiter of the bloc's fiscal rules is a good example.

The idea is simple enough. A group of 19 independent countries needs a few guardrails if they are to share a currency. Previous incarnations proved ineffective, and in part even misguided. There is widespread consensus that the increasingly complicated rules need an update. They were suspended at the start of the pandemic, but their impending reapplication in 2024, after debt in most countries has risen sharply (see chart), gives the current debate over their reform additional urgency.

The pandemic and the energy crisis that followed it have added two elements to the fiscal wiring of Europe. The first is that the European Central Bank (ECB) has made itself the lender of last resort to governments in all but name. It spent billions to backstop governments early in the pan-

demic, and then set up a new bond-buying programme called TPI as a back-up, to prevent rising interest rates from causing havoc in bond markets. Some economists now fear that the backstop could encourage governments to spend too much. "The ECB's new bond-buying programme makes it strictly necessary to have a credible fiscal framework," argues Luis Garicano of Columbia University. The ECB itself seems to agree. The first condition for being eligible for the bank's bond-buying is compliance with Europe's fiscal rules.

The second new element is the EU's post-pandemic recovery fund of €807bn (\$808bn), financed with common EU debt, hailed by some as Europe's Hamiltonian moment. The commission is largely in charge of first negotiating member states' national investment and reform plans, and then monitoring their implementation.

The commission's latest proposal for the new-look fiscal rules builds on this newly gained standing. Brussels would set out a path for net government expenditure that is reasonable and brings down debt levels over time. This part is a simplified version of the previous debt-reduction targets, which have become unrealistic for highly indebted countries. National governments would then send comprehensive plans back to Brussels on how to reach that path. If a plan involves bold investment or reform packages, the adjustment can be made less onerous.

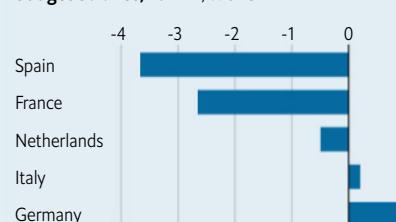
The package sounds familiar to connoisseurs of the recovery fund. The commission would now be put in charge of similar negotiations on euro-zone members' fiscal plans, and so in effect would decide whether countries are eligible for the ECB's backstop. Formally, the council that represents national governments would also have to approve the commission's assessment. "But not even the Germans trust themselves to be tough when the time comes, let alone the group as a whole," says Jeromin Zettelmeyer of Bruegel, a think-tank. In effect it would be the commission that decides whether to be tough or not.

That is seen as a problem in Berlin. The commission is not a trustworthy enforcer of fiscal discipline, the argument goes. But Germany may find itself alone this time. "The Dutch are traditionally aligned with Berlin, but they are much more open to such a bilateral approach by the commission," says Mujtaba Rahman of Eurasia Group, a consultancy.

The new commission proposal hints at a compromise. Stronger national fiscal watchdogs and their European counterpart could add their assessment of the fiscal plans, giving the exercise a more devolved feel. But the whole set-up would still throw the commission into the role of fiscal decision-maker. Does it have the political legitimacy to do it? ■

Big numbers

Average annual government primary budget balance, 2012-21, % of GDP



Government debt, % of GDP



France

War footing

LONDON AND PARIS

French forces are told to get ready for war

WINCED OUT of a helicopter down to an attack submarine, Emmanuel Macron could have upstaged himself this week. But with no cameras to immortalise the stunt, all eyes instead were on the French president's speech hours earlier. On November 9th, in the naval port of Toulon, Mr Macron unveiled France's new national strategic review, drafted after Russia's invasion of Ukraine. It contained important new thinking about France's response to shifting threats.

One arresting element of the document is its focus on Europe. In his speech Mr Macron announced the official end of Opération Barkhane, a French counter-terrorism mission first sent to beat back a jihadist insurgency in Mali in 2013. Although France pulled its troops out of Mali in August this year, 3,000 remain in the wider region. French soldiers, he said, would still deploy to the Sahel but only in support of local missions. For the French armed forces, traditionally organised around expeditionary and counter-terrorism missions in Africa, this marks quite a change.

At the same time, with war raging on its doorstep, the review stresses the need for France to prepare its armed forces for "high-intensity warfare", with an implicit emphasis on Europe. General Thierry Burkhard, chief of the French armed forces, has long argued—presciently, it turns out—for a remodelling of the military around readiness for this sort of war. The document does not say so, but analysts suggest France now aspires to have a full division ready for war in eastern Europe. "The pendulum is swinging back to Europe in ways that we French have not done since the cold war," says Bruno Tertrais, of the Foundation for Strategic Research, adding that this may in fact be excessive.

The review contains no hint of Mr Macron's pre-war hopes that Russia might be rehabilitated in a new European security order. Instead it echoes the tone of his speech to the UN in September, in which he condemned the Kremlin's "return to the age of imperialism". It warns of a confrontation unfolding "over a long period of time, in multiple regions and spaces"—a cold war in all but name.

There was plenty of continuity in Mr Macron's speech, too. He invoked the notion of strategic autonomy—the idea that Europe must be more self-sufficient—and repeated his long-standing vision of

France as a "balancing power" in the world. But he offered strong assurances that France would be an "exemplary ally" to NATO, whose highest readiness force is currently led by France. "NATO remains today the foundation and essential framework for Europe's collective security," states the review. Mr Macron also reaffirmed the doctrine that French nuclear deterrence has a "European dimension", an effort to row back on his recent comment that a nuclear attack on Ukraine "or in the region" would not affect French vital interests.

The good news for the armed forces is that they will have more resources to meet these aims. In September Mr Macron's government announced that the defence budget for 2023 would grow by an inflation-beating 7.4% to €43.9bn (\$44.1bn), a 36% leap from 2017. The bulk of that is to be spent on new equipment. Though the budget for 2024-30 has not been settled, it is likely to continue rising, and is not far short of NATO's target of 2% of GDP.

The bad news is that the holes in France's military capability, though no worse than its European peers, are gaping. Yohann Michel of IISS, a think-tank, points to shortages of long-range firepower, airlift, ammunition and a decline in training hours for the air force. He notes that in order to send just a dozen or so tanks to Romania without disrupting training, France had to withdraw them from Estonia. On November 8th Pierre de Villiers, whom Mr Macron sacked as armed forces chief in 2017, offered a scathing judgment: "The French armed forces today do not have the means to fight a high-intensity war."

Speaking from aboard a helicopter-carrier in Toulon, Mr Macron struck a sombre note. It would require a "Copernican revolution", he said, to think through new forms of conflict: "The aggression against Ukraine risks foreshadowing greater geopolitical rivalries to come." ■



Goodbye to all that

Greece

Who's spying on whom?

ATHENS

Yet more twists in a damaging scandal

GREECE'S GOVERNMENT has tried for months to keep a lid on a simmering scandal over the wiretapping of a journalist and two left-of-centre politicians. But on November 5th *Documento*, an investigative weekly, published a list of 33 prominent Greeks, among them several cabinet members and a former prime minister, whose mobile phones were reportedly targeted for hacking by Predator, a bit of Israeli-made spyware.

Kyriakos Mitsotakis, the prime minister, denies that his government has ever bought Predator, which is similar to Pegasus, a better-known Israeli tool used by authoritarian regimes. He says he was unaware of the phone-hacking. But he has admitted that Greece's intelligence service, EYP, routinely snoops on thousands of citizens for reasons of national security.

The opposition Syriza party claims the government is covering up "Greece's Watergate". A judicial inquiry into the Predator affair is moving at a snail's pace. Visiting Athens last week, members of the European Parliament's PEGA committee, which investigates the illegal use of spyware in the EU, voiced frustration over the government's unwillingness to co-operate.

Sophie in't Veld, PEGA's rapporteur, says that, unlike Hungary, Greece is not a "deliberately autocratic" state. But she says the evidence suggests that "spyware is being used in a systematic way as part of a political strategy". Nikos Androulakis, an MEP, was reportedly targeted last year while running for the leadership of the Pasok-Kinal socialist party. Another alleged Predator victim, Antonis Samaras, a former prime minister, heads a faction in New Democracy that could challenge Mr Mitsotakis's grip on power. The government denies any involvement, and *Documento*'s list of victims has still to be verified.

Ordinary Greeks understandably seem rather more concerned with big rises in fuel prices as winter approaches than with perceived threats to democracy and the state of the country's security. Despite a strong rebound in tourism this year, double-digit inflation is eroding disposable incomes. With an election due by next July at the latest, New Democracy holds a shrinking but still comfortable lead in opinion polls. Yet even his supporters admit that "Predatorgate" is undermining Mr Mitsotakis's hard-won credibility as a modernising pro-European politician. ■

Charlemagne | In praise of Euro-gibberish

How the EU got its weird language, and why it is useful



IN BRUSSELS, ACCORDING to a character in "Borgen", a Danish political drama, "nobody can hear you scream." Even if they could, they might not understand what was being said. Something about comitology, TITROS and a holistic strategy on equitable rural development, whatever that might be? Most organisations, from the most gargantuan government to the tiniest start-up, develop their own jargon. The EU has created one so rich and acronym-filled that it surely counts as a dialect in its own right. Ministers who visit town are handed glossaries of Eurospeak; a local interpreter might soon be needed. Critics see this as evidence of officialdom run amok, of unaccountable Eurocrats so isolated in their ivory tower that they can barely communicate with mere citizens. Charlemagne, a near-fluent Eurospeak, would like to defend his hometown patois. Not only is it an inevitable corollary of a multilingual union, it is a welcome one.

A recent study confirmed that denizens of the Brussels EU quarter speak a unique language. Christian Rauh of the WZB Berlin Social Science Centre analysed decades' worth of press releases put out by the European Commission, the bloc's executive arm. The 45,000 documents studied were written in undiluted officialese. Whereas bureaucrats in Ireland and Britain use roughly the same vocabulary as newspapers, Eurocrats communicate with words not used by anyone else, from "trilogues" to "co-legislators" (don't ask). Their prose is as opaque as that in journals of political science. National governments write in a way that a typical high-school pupil can understand. Eurocrats befuddle anyone who lacks a university education.

Crunching words through a machine to glean their linguistic complexity is an imperfect science. But the results of the study chime with experience: the language of Eurocracy lies somewhere between the clunky and the incomprehensible. Yet how could it be otherwise? The EU's 450m citizens use two dozen official languages, and speak many more at home. An individual Eurocrat may master two or three, but seldom more and never all of them. In theory French and German share the status of English as joint *linguae francae* of the EU. However, despite decades of French moaning, in practice most people use English (which is the language of the press releases analysed in the study).

The *langue de Shakespeare* has been adapted for Brussels in two ways. First, Eurocrats often use English words in ways that native speakers struggle to grasp. They "assist" meetings instead of attending them. They "externalise" a task rather than merely outsourcing it. If they talk of an "actual" situation, they mean the current one. Much of this is due to officials seeing a word they recognise from their own language, and then assuming it must mean the same thing in English. Their interlocutors then pick up the baton and misuse the term in the same way: Brussels is a place where diplomats from far and wide perfect their English by speaking to people who do not speak it well either. While Britain was a member, Brits occasionally fussed at such linguistic inexactitude. Other Europeans shamed them into silence by pointing out that few Brits can speak foreign languages badly, let alone well. Not many native English speakers are now left. Massacring their tongue is considered fair retribution for Brexit, though obviously a milder punishment than British voters inflicted on themselves.

The bigger impediment to normal humans understanding Eurocrats is jargon. Countries that wish to join the EU need to adopt its *acquis communautaire* of existing legislation; newcomers to Brussels need to pick up what might be called the *acquis linguistique*. A "Gymnich" means nothing beyond EU circles, but is known to be an informal meeting of the bloc's foreign ministers (named after the castle where it first happened). Coreper, short for Comité des représentants permanents, sounds to outsiders like a car body shop, but is in fact the powerful forum where national governments thrash out deals behind closed doors. An entire caste of Brussels diplomatic aides is known as "Anticis" after a long-forgotten predecessor, Paolo Antici, who held the job for Italy in the 1970s. Words with no precise translation are simply imported from whatever language offers the best term. Can't quite rustle up the English idiom for a politician wrangling legislation through parliament, or leading her party into elections? No worries, *rapporteur* and *spitzenkandidat* will do.

When jargon jars

Does this Euroblather alienate outsiders? "Technocratic communication... plays all too easily into the hands of those who want to construct the image of a Brussels elite that is detached from the European citizen," finds Mr Rauh, the linguistic hawk. Whether this is really a problem depends largely on what role one sees for Brussels and its Eurospeakers. If one thinks of the EU as a sort of government-in-the-making, then having a vernacular spoken only in the corridors of power is indeed troubling. Voters need to understand their politicians to hold them accountable. As things stand, linguistic isolation betrays a remoteness from the people whom the union is supposed to serve.

But what of those who have more healthy aspirations for the EU? Brussels these days is not itself a seat of government, but a place where clever clogs from across the continent toil behind closed doors to offer compromises to national politicians on everything from fisheries regulation to arming Ukraine and cutting carbon emissions. This is thankless but necessary work, best done out of the public gaze. The city's linguistic isolation in this context matters not one bit. Eurocrats are not communicating with the public, they are chattering among themselves. Making deals palatable to 27 national governments with their own electorates is a messy business. While it attempts to do this, the EU machine benefits from the obscurity provided by its vernacular. The obfuscation of Eurospeak is not a bug, it is a feature. ■



Infrastructure planning

Taking the slow road

THE A428 NEAR ST NEOTS

Why it takes so long to build new infrastructure

**BRITAIN'S
GROWTH
CRISIS**



ANYBODY DRIVING from Milton Keynes A to Cambridge in eastern England is likely to take the A428. The road is mostly fine. But for 15km between St Neots and Caxton Gibbet (a place reputedly named for the grisly practice of hanging dying and dead criminals in cages) it narrows to a single carriageway—one lane in each direction. Traffic jams and accidents are common. The local MP, Jonathan Djanogly, calls the A428 “a very nasty road”.

In 2003 a regional transport study proposed upgrading the road to a dual carriageway. Eleven years later the transport secretary, Patrick McLoughlin, announced that the government would pay, as part of a road-building programme that would put “the motorist centre-stage”. The years

ticked by. Construction is now expected to begin next year, although that will depend on the outcome of a legal challenge. All being well, it will open in 2026.

This is mighty slow progress, although not especially so by the standards of British infrastructure projects. A third runway at Heathrow Airport, backed by the government in 2003, is even further from being built. A road tunnel near Stonehenge was proposed in 1995; it remains far off. Know-

ing that infrastructure investment boosts economic growth, successive governments have tried to accelerate matters with initiatives such as “Project Speed”. But the reverse is happening. The process is slowing down, and churn at the heart of government is itself largely to blame.

Local authorities tend to handle small infrastructure projects such as roundabouts. But almost anything deemed “nationally significant”—which, in highly centralised Britain, includes a 15km-stretch of dual carriageway in eastern England—goes through a special process introduced in 2008. Designs are created; consultations are held; reports are solicited from environmental and heritage groups. The Planning Inspectorate, a government agency, must then issue a recommendation within six months. Government ministers have the final say, issuing “development consent orders” that allow construction to go ahead.

For a few years the system worked splendidly, says Ian Fletcher of Jacobs, an engineering and professional-services firm. A large sewer under the Thames known as the Tideway Tunnel was approved quickly, as was a new nuclear power station at Hinkley Point. Then things began to slow. “You could see the slip starting to happen” about five years ago, says Robbie Owen of Pinsent Masons, a legal firm. ►

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The planning inspectors continue to hit their six-month deadlines. But the process of designing, consulting on and refining infrastructure projects is taking longer. Then, after the inspectors give their opinions, government departments are dithering over whether to proceed. Even when they give the go-ahead, a growing number of schemes end up in court.

People living near the A428 have been consulted three times. National Highways, a government-owned company, solicited their opinions about four slightly different routes in 2017, asked them about the preferred route in 2019, and then, after making minor changes, asked again in 2020. Public consultations tend to last less than eight weeks. But each one takes months to prepare and months to digest. And they are not supposed to run over Christmas or the August holiday season.

In this case they all found the same thing. "The vast majority of people who were consulted were happy, as am I," says Mr Djanogly. St Neots is a car-oriented corner of England and, in truth, not a beautiful one. The land is flattish and intensively cultivated, with only some barbastelle bats to worry about. Further riches lie below ground—archaeologists scouring the land before the engineers move in have discovered Neolithic arrowheads, the remains of Iron Age roundhouses and a Roman kiln—but road-building is not nearly as controversial as it is near Stonehenge.

Not everybody wants the road, though. Soon after the government gave its formal consent to the project in August, an environmental group called Transport Action Network applied to the High Court for a judicial review of the decision. The group argues, among other things, that the Department for Transport did not properly consider local targets for carbon emissions. If a review goes ahead, the bulldozers will sit idle for many more months.

Judicial reviews are becoming more



common—and more obstructive. Mustafa Latif-Aramesh of BDB Pitmans, a law firm, says that, between 2010 and 2020, ten of the development consent orders signed by ministers were reviewed. None was quashed. Since then, however, four judicial reviews (for an airport in Kent, road junctions near Derby, the tunnel near Stonehenge and a wind farm off the coast of Norfolk) have succeeded. Inspectors are growing more critical, too. Mr Latif-Aramesh counts two occasions between 2010 and 2019 when they recommended refusal, and ten since. Ministers can and do approve projects anyway, but the examiners' reluctance emboldens opponents.

Many of these hitches have a common cause. The system for assessing large infrastructure projects rests on a pile of documents known as "national policy statements", which set out the government's approach in specific areas such as roads and railways, electricity networks and water resources. Planning inspectors use them to assess projects. The national policy statements are supposed to be refreshed about once every five years, but this has not been happening. As they grow yellow, planning grows fraught.

"The world moves on," says Sir John Armitt, chairman of the National Infrastructure Commission, an advisory agency. Since the national policy statement for roads was created in 2015, the government has enacted a law obliging it to reach net zero greenhouse-gas emissions by 2050. Last year a transport strategy proclaimed that "we will use our cars differently and less often". Local governments have created emissions targets of their own. Meanwhile, the covid-19 pandemic has transformed people's travel habits.

As a result, it is easier for groups such as Transport Action Network to argue that a road project like the A428 is unnecessary, and that laws are not being followed properly. Judicial reviews are more likely to succeed. And the growing fear of judicial reviews in turn makes everybody more cautious and finicky about consulting the public and interested groups, gumming up the entire planning process.

National policy statements are hefty documents, which bind the government to courses of action. It is not surprising that

they are neglected when policies and prime ministers change as frequently as they have recently. In July 2021 Grant Shapps, then the transport secretary, announced a review of the road and railways document, but this has not been completed, and Mr Shapps has changed jobs. A new national policy statement for water resources, which might encourage the construction of more reservoirs, was promised for 2019. It has still not been finished.

"Every government wants project speed," says Sir John. And some aspects of the planning and building process could probably be accelerated. National Highways currently hopes to get another road, the A66, upgraded quickly by compressing environmental reviews and asking the contractors to work differently. But a critical reason for the slowness in building infrastructure is not the planning system. It is the fact that British ministers have been unable to specify what they want, or to explain how their longing for infrastructure should be reconciled with their desire to protect the environment. Their confusion is the problem. Politician, heal thyself. ■

The autumn statement

The nerds are in charge

The OBR suddenly has too much power. It isn't to blame

HAS A FISCAL watchdog ever had more bite? The Office for Budget Responsibility (OBR) was sidelined by Kwasi Kwarteng, a former chancellor, who rejected the body's offer of an official forecast to accompany his infamous tax-cutting budget in September. The result was panicky investors, soaring gilt yields and financial turmoil. Now, with its own reputation for fiscal competence shot, the government has to borrow credibility from the OBR.

So when Jeremy Hunt, the current chancellor, delivers his autumn statement on November 17th, the view of around 40 nerds in an office on Petty France, in central London, will be crucial. Their job is to forecast the health of the economy over the next five years, given everything from likely levels of immigration to the effect of war in Ukraine. The wonks must then translate these predictions into a fiscal forecast, and decide whether the government is meeting its stated fiscal rules.

Mr Hunt is expected to pledge that debt will be falling as a share of GDP in five years' time. He needs the OBR to agree that this will happen. Before, there might have been room to quibble with the OBR's views. That seems almost impossible now. ►

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This unusual clout raises three concerns. First, that the OBR is spuriously precise: Julian Jessop of the Institute for Economic Affairs, a right-wing think-tank, warns against making too much of a single forecast given the amount of uncertainty involved. Second, that it will bounce the government into over-tight fiscal policy. And third, that it is too cautious about the effect of supply-side reforms.

Start with worries about its accuracy. The OBR, which was formed in 2010, is definitely not the perfect oracle. Its autumn forecasts have been wrong about that year's amount of public borrowing by 0.4% of GDP, on average; at the end of its five-year forecast horizon, its forecasts are out by an average of 2.3% of GDP. Mr Hunt's debt goal will rest on the OBR's judgment of nominal growth between the fourth and fifth year of the forecast horizon; the OBR has on average been off by two percentage points on this figure.

The fairer question is whether the OBR's predictions are worse than anyone else's. Its errors are on average smaller than those made in the 2000s, when the government was responsible for forecasts and often presented excessively rosy pictures of the public finances. And it does try to quantify the uncertainty surrounding its judgments. In March, for example, its central forecast was that the government would meet each of its fiscal rules at the time, but it said there was a 54% probability that at least one of them would be missed.

What of fears that the OBR has a harmful fiscal conservatism baked into it? In the early 2010s it may well have been too pessimistic about the potential for looser fiscal policy to boost GDP. But the OBR's assumption, that over five years a fiscal expansion would be undone by tighter monetary policy, is harder to criticise in these more inflationary times. What is more, a five-year time-frame gives the government scope to phase in changes that might capsize the economy if they were introduced quickly.

The OBR may be too cautious about the effect that reforms can have on growth. Take plans to spur investment: one former government adviser grumbles about its assumption that £1 spent on research and development has the same effect on the economy as £1 spent on building a prison. But its defenders say that growth-enhancing proposals—to accelerate planning, say—don't always come to pass; and that the benefits of reforms in areas such as skills can take longer than five years to show up.

The OBR could improve. Hiring fewer Treasury staff would reduce the risk of groupthink; handing it more resources to do its own research could promote better policymaking. But the big problem is that there ought to be some room for the government to challenge the OBR's judgments. That privilege has to be earned back. ■



Evelyn de Rothschild

Upholder of legacies

Remembering Sir Evelyn de Rothschild, chairman of *The Economist* for 17 years

IT WAS AN 11-minute walk down Ebury Street from Santini's restaurant in Belgravia to William Curley's chocolate shop, then in Pimlico. At Santini's, Evelyn de Rothschild plus guest would be greeted as heroes: because all staff knew you would eat heroically. But at Curley's you were greeted as owners—because Sir Evelyn was the backer and prime owner of the business. Along with flat racing, chocolate was his passion.

Also his was Sotheran's, the rarest of London's rare-books shops, where, if you could afford it, you just might find a set of Audubon's volumes. Unbroken.

Evelyn was no aesthete, nor an intellectual. But he believed in intellect, for a reason: a mighty Rothschild from the previous generation, Anthony de Rothschild, was his father. Both men went through Harrow and Trinity, Cambridge. But "Tony" de Rothschild had taken a double first, whereas Evelyn never tried to mimic that. He determined, instead, to uphold magnificently his father's legacy.

Uphold it he did at Ascott, near Tring, with its rare library and its plutocratic collection of pictures. Uphold it he did at *The Economist*, where Tony had joined Walter Layton and Brendan Bracken in 1928 to build the shareholding structure which entrenches the editor's freedom to this day. Evelyn became the paper's chairman for 17 years from 1972, supporting without stint three editors through the era when its modern success was set.

And uphold it he did, above all, at

"NMR"—N.M. Rothschild, where Evelyn secured, through turmoil, the future of his father's merchant bank. He kept it small. Most years, too, he kept it highly profitable—an elite "accepting house", and thus close to the Bank of England; core of the gold-dealing heart of the City; adviser to the queen; immune from the big-time-investment-banking model copied from New York. Evelyn finally bolstered his bank by merging with his French cousins.

Outsiders wondered how this voluble but inarticulate man, often impatient with detail, could achieve so much. He could badger subordinates beyond limit. Yet few people of talent ever left him. Whether driving his generous charity, Eranda, or as the boosterish deputy chairman of the charter "new town", Milton Keynes, Evelyn would skate over the tiresome numbers to go for the big picture.

To get there, he would recruit executives and editors often more dynamic than himself. At Sotheran's this method half-failed before the jungle of Amazon. But it did not fail at NMR, where his consigliere Michael Richardson became Margaret Thatcher's favourite banker, the triumphant privatiser of national industries—sell-offs all but monopolised by NMR.

It did not fail, either, at *The Economist*, where Evelyn compelled the management to "get out of printing" years before his friend Rupert Murdoch's Wapping revolution. With help from John Sainsbury, he also massively increased the paper's puny circulation in America.

Interference was part of Evelyn's technique. At the NMR sanctum, at general-election time, the entire staff would receive a memo suggesting they vote Tory.

This slant was to change, however. In 2000 he married Lynn Forester, who became his third wife. She refreshed his energy. Brave ventures followed, notably in India. And she opened him to social democracy. He plunged into this new world with gusto. In her native America, Lynn brought him into the Clinton entourage: she fiercely backing Hillary for president, he preparing to lose at golf to Bill.

There was one area where Evelyn never interfered. He never once pressed his trenchant views on the paper. In September 1980 he and his cousin Jacob parted in acrimony, the most notorious bank-family split in City of London history. This newspaper did not disguise its view that "Mr Jacob", not "Mr Evelyn", had the correct vision of the City's future. For Cousin Jacob was prophetically ahead of the Big Bang.

When Evelyn paid me his weekly visits he never once mentioned these articles, so hurtful to him as they were. Nor did he comment on any other article, even those where he was in the know. For he knew that his father would not have done so either.

Andrew Knight, Editor, 1974-86

Bagehot | The night-watchman welfare state

How Britain ended up with the worst of all worlds



ALTHOUGH FOREVER associated with the term, William Beveridge never liked the phrase "welfare state". The man who 80 years ago this month published the blueprint for Britain's post-war welfare state thought it conjured up an image of a "brave new world", rather than the culmination of 50 years of reform by Conservative, Liberal and, eventually, Labour politicians. Newspaper cartoonists ignored his objections. One turned a besuited Beveridge into a steaming mug being toasted by a British soldier in 1942: "Here's to the brave new world!"

A plan to combat the five giants of want, ignorance, squalor, idleness and disease was the defining political quest of the first half of the 20th century. It replaced a rather 19th-century idea of a "night-watchman state", where the government saw its role as offering physical security and not much more. Skip forward eight decades and Britain has ended up with the worst of both worlds. Britain is a libertarian's nightmare, with the state expanding to 45% of GDP; the tax burden is likely to creep towards levels not seen since Clement Attlee, the Labour prime minister who put Beveridge's plan into practice. Yet it also manages to be a social democrat horror show, achieving little despite its vast size.

Increasingly the Conservative government provides a welfare state in name, but a bare bones night-watchman state in practice. The police will probably find your killer but they will make no effort to find your stolen bicycle. If you're hit by a car, the NHS is likely to save your life. But if you require a hernia operation, you may wait a year or two (or give up and go private). A 19th-century concept of the state has collided with a 20th-century vision to create an intolerable 21st-century chimera.

The promise of a cradle-to-grave system has been replaced by a cradle-and-grave one, with the middle largely forgotten. Working-age benefits are terrible. Unemployment benefit is set slightly above destitution levels, at barely £80 (\$91) per week, says the Resolution Foundation, a think-tank. That equates to 14% of average earnings or roughly half the level it was in the 1970s. In the Netherlands, this payment starts at 75% of someone's last pay slip.

In theory, the night-watchman state does little but is, at least, cheap. A welfare state may cost a lot but it provides a lot. The current British state falls between these two stools. Britain still has a

comparatively low tax take compared with other rich European countries. But some people within the system are hammered, suffering Scandinavian-level marginal tax rates for South Carolinian services. A recent graduate earning £30,000 faces an almost Scan-dim marginal tax rate of just over 41% once national insurance and student-loan deductions (which behave like a tax) are included.

This situation will get worse. Einstein is said to have joked that compound interest was the most powerful force in the universe. He might have added: the second-most-powerful force is fiscal drag. If the government freezes the threshold for the higher tax rate of 40% at £50,000, a senior teacher will end up in a tax bracket designed for well-paid solicitors. As an added blow, once-universal perks, such as child benefit, are whittled when incomes hit £50,000. If nominal wage growth remains healthy, come 2027 a Londoner on an average salary (currently £42,000) would begin to lose their child benefit. Beveridge pushed his reforms with the slogan: "Bread for all...before cake for anyone". Now the mantra is bread for some and cake is off the menu.

Taxes are high enough to create big expectations, but too low for them to be met. The contributory system, which allows people who pay in more to take out more, has enabled many northern European countries to remain generous. In Britain that principle is dead. National insurance is a bog-standard tax, even if people like to pretend it is a pot of money with their name on it. Pensioners are aggrieved that the state pension is lower than in, say, Ireland, even if it is much more generous than it was. Younger voters are fed up that the state provides so little yet takes so much, largely to hand money to older generations. There is little optimism that they will benefit in turn.

Even the literal night-watchman part of the state is asleep on the job. The proportion of crimes that lead to a charge has fallen from 16% in 2016 to 5.6% today. Petrol theft is in effect legal—at least according to a flow-chart that dictates whether an officer from the Metropolitan Police bothers to investigate the crime. Unless the number plate of the driver has been captured in the same situation before, the police will close the case. People can show the cops a live GPS tracker of their missing laptop and be told that there is nothing that can be done. A stolen car is written off with an apologetic automated email from the police. The long arm of the law is rather short.

A broken light

Spared the worst of austerity, the National Health Service (NHS) is the only adequately funded part of the British state, and then barely. At times the NHS seems itself to be a pale imitation of the welfare state. Doctors will prescribe food vouchers for people to claim at a food bank, since in-work benefits are too low. One hospital trust has set up its own supported-living unit because the council is too broke to fund theirs. Elsewhere, a charitable wing of a hospital pays for local low-traffic neighbourhoods rather than the council that is actually responsible for roads. The NHS is burdened with such tasks while waiting lists are at historic highs of 7m. It has become the state of last resort.

Britain has always attempted to provide a welfare state on the cheap. An ageing population, forcing ever greater demands on a struggling state, means that this approach has run out of road. A part-watchman, part-welfare state does not work very well. In 1942, as the second world war raged, Beveridge wrote that "a revolutionary moment in the world's history is a time for revolutions, not for patching". Once again, the time for patching is over. ■



Ukraine

A new Marshall Plan?

BERLIN, KYIV AND LUKASHIVKA

Donors are already wondering how to help Ukraine rebuild

THE FIELD next to Grigoriy Tkachenko's fish pond is littered with spent 220mm rockets. His carp are dead: the Russian soldiers who occupied his farm in March and April fished for them by tossing grenades into the water. Russian shells blew holes in the farm's new office and its automated milking stall. Mr Tkachenko reckons his losses at roughly \$1m, including 158 cows, about half his herd. "The Russians killed them and ate the parts that were easy to butcher," he says. "They left the rest to rot."

Yet by mid-October the farm, in Lukashivka, 120km north of Kyiv, was bustling again. In a vast concrete storage shed, forklifts stacked crates of potatoes while workers supervised machines that use lasers to sort the spuds by size. Most of Mr Tkachenko's fields were free of mines, his wheat, corn and sunflower crops had been harvested, his grain elevator had been fixed and his remaining cows were chomping away in their pens.

Ukraine, like Mr Tkachenko's farm, is in a state of buzzing confusion. Ukrainians

are scrambling to repair what Russia has broken and to keep the economy running. Steel plants pour white-hot metal to make rebar; restaurants serve food to the noise of air-raid sirens. Yet the destruction Vladimir Putin has wrought is immense. Entire cities are in ruins. Some 8m people, a fifth of the population, have fled the country. Ukraine's government reckons GDP in 2022 will be 30% lower than in 2021. Counting only the damage done before June 1st, the World Bank estimated the costs of reconstruction at \$349bn. Since then the bill has risen: for the past month Russian missiles have been smashing up the power grid.

Recovering from all this, Ukraine's allies think, will require aid comparable to the Marshall Plan, the huge American programme that kickstarted Europe's economic recovery from the second world war. Indeed, in some ways rebuilding Ukraine seems harder. Unlike the Marshall Plan, which started years after the war ended, aid to Ukraine is flowing while the shells are still flying. That makes attracting

private money almost impossible, for now: foreign investment into Ukraine is barely 1% of its level in 2021. With the war slashing tax revenues and half of the government's budget devoted to the army, Ukraine needs \$3.5-5bn in aid every month just to cover its budget deficit.

Another problem is complexity. The Marshall Plan's money came from America. In Ukraine aid has come mainly from America, but also from the EU, individual European and Asian countries and an array of multilateral institutions—the World Bank, the IMF, the European Bank for Reconstruction and Development, the European Investment Bank and others. For the war's first eight months pledges came sporadically. Only now are the main donors planning regular meetings to co-ordinate.

Sceptics of reconstruction aid to Ukraine note that such funds did little good in war-ravaged Afghanistan and Iraq, or in disaster-struck Haiti. Donors in those places failed to help create functional states, and much of their cash was stolen. This is a big worry for Ukraine, long one of Europe's most corrupt countries.

But Ukraine is not like Afghanistan or Iraq. There, donors were trying to impose a completely new system of government, which many locals resisted. Ukraine is more like post-war Europe, where an injection of funds helped locals rebuild prosperous, industrialised societies that they already knew how to build, because they had ➤

built them before war wrecked them. Ukraine was a democratic and fairly sophisticated middle-income country before the war, and making efforts to tackle graft. It seems plausible that Ukrainians can recreate what they had before and, with help, improve on it.

History offers useful lessons. Although the Marshall Plan is now remembered as a success, things were complicated at the time, says Margaret MacMillan, a historian at Oxford. "There were real strains within [the Marshall Plan], real difficulties, moments when it might have collapsed," she says. There was bitter disagreement within America's government over how to structure the programme, and within Congress over whether to fund it at all. European governments and voters were suspicious of the conditions attached to the aid. Only the threat of communism persuaded all sides to overcome their qualms. And though the plan was a success in West Germany, its results in some other countries were mediocre. To understand why it is worth trying to help Ukrainians rebuild, it helps to consider how difficult the Marshall Plan actually was.

Fables of the reconstruction

In mid-1947, two years after the Nazi surrender, Europe's economies were still in ruins. Germany, divided into American, British, French and Soviet zones, subsisted on American humanitarian aid. In the British zone rations had fallen to 1,050 calories per day. In the Soviet zone factories were being dismantled, or their products shipped east, as war reparations, while in the French one quotas of German goods were sent to France at cut-rate prices. Industrial production was capped for fear of reviving Germany's military might, and commerce between the zones was restricted. Josef Stalin, the Soviet leader, blocked all attempts by America and Britain to liberalise trade unless they would agree to create a unified German government—which he planned to subvert and control, as he had throughout eastern Europe.

Germany's economic misery was echoed across the continent. In France farmers declined to plant their fields because, with industry paralysed and foreign currency restricted, the francs they got from customers could not buy the imported machinery they needed. Italy's unemployment rate was so high that one of its government's chief aims was to encourage emigration. Britain, weighed down by debt from the wartime Lend-Lease programme, was on the verge of a currency crisis.

America's response was hamstrung by division. A wartime plan for post-war Germany, devised by Henry Morgenthau, treasury secretary under Franklin Roosevelt, had aimed, absurdly, to deindustrialise the country. After Roosevelt died in 1945 Harry



A lesson from history

Truman, his successor, pushed out Morgenthau and turned to George Marshall, a former general. Marshall wanted to unify and liberalise German commerce, but hesitated at the implications. Stalin would reject the move, and fusing the three western zones could provoke him to war.

Marshall's plan for a European Recovery Programme envisioned a huge injection of American aid. (The final sum would be equivalent to 5% of America's GDP in 1948.) American dollars would solve Europe's shortage of foreign exchange, allowing its industries to trade their way to prosperity. They would also be a prize to induce European governments to relax the restrictions paralysing their economies—a way for America to "knock heads together and impose an agreement," as this newspaper advocated at the time.

But America and the Soviet Union were not yet formal enemies. Truman could not simply offer vast sums to Europeans—including Germans—while excluding his erstwhile Soviet allies. Many Europeans, especially the 15% or more who backed

communist parties in France and Italy, would have seen this as a provocative American scheme to create an anti-Soviet alliance. The Soviets had a big army, and might have decided to grab all of Germany.

Instead, Marshall invited the Soviets to join. They would no doubt have tried to sabotage the programme, but the hope was that the conditions placed on the grants (open trade integrating all of Europe, rather than quota-based trade oriented towards Moscow) would make them reject the plan. The gamble paid off: Stalin did just that, and told his new satellites in eastern Europe to stay out, too. Communist parties in western Europe were ordered to denounce the aid offer as capitalist imperialism in disguise—and were sidelined by governments eager for American money.

The plan had enemies in America, too. On the left Henry Wallace, running for president as a progressive, allowed Stalin to contribute notes to a campaign speech blasting the plan. On the right, isolationist Republicans grumbled at handing out more aid. (One congressman argued that Europeans were just "not working as hard or as vigorously as they should"; a senator denounced the plan as "financ[ing] socialism all over Europe".) But Marshall and his allies sold it as a way to wean Europe off the aid that America was already providing—\$13bn since the war's end.

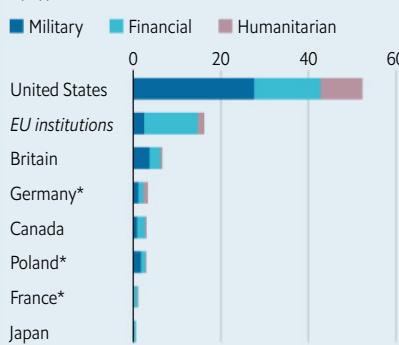
As the aid began to flow in 1948, European growth took off. Industrial output in Marshall Plan countries increased by more than 60% between 1947 and 1952; in West Germany it more than tripled, and annual GDP growth in some years hit double digits. Barry Eichengreen of the University of California at Berkeley estimated that in 1948-49 the Marshall Plan contributed between two and seven percentage points of growth in various countries.

Yet not all benefited equally. In West Germany, the American bodies that administered the plan had tremendous power and ensured that funds were spent on genuine investments. In France, however, much of the aid was used to back national-champion firms; in Italy it was often used to import commodities rather than industrial machinery. In Britain, where the plan boosted growth the least, it was used to pay off war debt. In Britain and France, says Albrecht Ritschl of the London School of Economics, "there is a consensus among historians that it was not very successful. There was a lot of capture."

"Capture" is a term one hears often when aid officials are worried. It is what happens when money or programmes come under the control of gatekeepers who pursue their own interests rather than those of the public. Sometimes that means men with guns, as with the warlords who turned nation-building in Afghanistan into a corruption-ridden disaster. In other

How the money flows

Selected countries, government support to Ukraine
By type of assistance, Jan 24th-Oct 3rd 2022, £bn



*Not including funds distributed by the EU

Source: "The Ukraine support tracker: which countries help Ukraine and how?", by A. Antezza et al., Kiel Working Paper, 2022

► cases, as in the UN-led aid programme in Haiti after its earthquake in 2010, they may be the very contractors or consultants hired to carry out the reconstruction, who take in high fees for useless work.

There are two stories about Ukrainian corruption. One is dismal, the other hopeful. "Ukraine doesn't have that much petty corruption," says Arup Banerji of the World Bank. "The biggest corruption challenges in Ukraine are much more state capture: high-level influencing of policies and directing of resources towards preferred parties." A typical case emerged in mid-October: a property developer had allegedly offered to pay the mayor of Dnipro \$22m for the right to determine which companies would build a new metro line in his city. (The developer denies the allegations.) But Ukraine has also been a breeding ground for political movements that fight graft. Since the Maidan revolution in 2014 anti-corruption reformers have made dramatic progress, albeit with many setbacks.

More money, more problems?

So long as the war continues, graft is not the chief concern. Much of the money flowing into Ukraine now goes on immediate priorities such as paying salaries and social benefits. Those are easy to verify because they can be traced to individuals, says Mr Banerji. Other aid is spent repairing the power grid and other infrastructure. Demand is so intense that few people think there is much skimming going on.

Ukraine's government expects this phase of foreign aid to last as long as the war does. Even here, the sums involved are considerable (see chart on previous page). In the first international donors' conference, in Lugano in July, Ukraine presented an enormous national recovery plan, with hundreds of projects that had been suggested in a month-long consultation between the government, business and civil-society groups. At a second meeting in Berlin on October 25th, the ambitions were more sober. Oleksiy Chernyshov, then minister of development (he has since been appointed head of Naftogaz, the state gas company), outlined three stages of aid. The initial wartime phase might last from 18-36 months. About \$38bn is needed to cover the budget deficit in 2023, says Oleksandr Hryban, deputy economy minister.

A second phase, spread over the first two years after the end of hostilities, would need even more cash—perhaps \$105bn for tasks such as rebuilding housing and transport. Only a few years after the end of fighting would the Marshall Plan-like phase begin, with another large, but as-yet unguessable, amount of aid going to transformative projects to "build back better". That might include building a greener energy system and helping businesses meet European environmental and safety regu-

lations, to help Ukraine with its ambition to join the EU.

It is this latter phase that most worries anti-corruption advocates. A tide of post-war reconstruction money risks making corruption worse, says Ivan Lakhtionov of Transparency International, an anti-corruption NGO. The war has created a tremendous sense of patriotism, but "everybody fears that after the war, things will be like they were before," says Valerii Pekar of Nova Kraina, a civil-society coalition. He and Andrii Dligach, an entrepreneur, advocate greater inclusion of civil-society groups and business organisations in planning for economic recovery. The national consultation before the Lugano conference involved broad participation, but since then some civil-society groups say their access to government has shrunk.

The Ukrainian state's past corruption problems mean some activists think a better solution would be to prevent aid money from flowing through the government at all. The Anti-Corruption Action Centre (Antac), Ukraine's best-known anti-corruption NGO, argues that funds should go directly from donors to contractors. "The point is to remove the temptation," says Olena Halushka, a board member at Antac. But Mr Banerji, at the World Bank, points out that when wary donors channel aid to NGOs rather than the government, they can end up undermining the state.

There are other ways to keep tabs on where the cash ends up. After the revolution in 2014 civil-society groups, programmers and government reformers developed Prozorro, a digital system for monitoring state procurement. It is now considered among the best open procurement systems in the world. Since 2016, all of the paperwork associated with every Ukrainian government contract has been available online. Thousands of investigative reporters and volunteer busybodies, known as Dozorro, comb through the database

looking for anomalies that could lead to lawsuits or juicy articles.

Most areas of government contracting were removed from Prozorro when the war started, because the government was worried Russia might use it to gain intelligence. That degraded the system a bit, says Mr Lakhtionov: the algorithms it uses to search for tenders that look suspicious do not work as well when there are fewer to compare. But most contracting is gradually being put back online, says Nadiya Bigun, deputy minister of economics responsible for procurement.

The government is working with a group of civil-society and business associations known as the RISE coalition to adapt Prozorro for international donors, such as the World Bank. "Ukraine is not Afghanistan, it's not a failed state," says Viktor Nesutlia, who helped build Prozorro and now works with the RISE coalition. Civil servants have kept working doggedly, despite the war. The country has been seized by a mood of patriotic solidarity. Foreign donors, while recognising the peril of reconstruction, also see its promise. In September USAID, an American aid agency, published a guide for using aid to fight corruption that featured Ukraine as its case study.

The Marshall Plan, at least, serves as a counter-example to recent history, by proving that huge aid projects, if well executed, can indeed help rebuild and strengthen countries. It is also a reminder that such programmes always have political stakes. In 1947 America was trying to win over Europeans in a struggle against communism. With the war in Ukraine, Ms MacMillan observes, Western countries have discovered that non-aligned countries in the global south do not share their views or trust their intentions. Aiding Ukraine's recovery is a way to show that Western generosity is sincere, and that security and prosperity still go hand in hand, for Europe and Ukraine alike. ■



Another few bricks in the wall



Cooking the books

A sleuth's guide to corporate fraud

As the economy sours, brace for a wave of scandals

THE BAD news just keeps coming. Ten months after America's stockmarket peaked, its big technology companies have suffered another rout. Hopes that the Federal Reserve might change course have been dashed; interest rates are set to rise by more than previously thought. The bond market is screaming recession. Could things get any worse? The answer is yes. Stockmarket booms of the sort that crested in January tend to engender fraud. Bad times like those that lie ahead reveal it.

"There is an inverse relationship between interest rates and dishonesty," says Carson Block, a short-seller. Quite so. A decade of ultra-low borrowing costs has encouraged companies to load up on cheap debt. And debt can hide a lot of misdeeds. They are uncovered when credit dries up. The global financial crisis of 2007-09 exposed fraud and negligence in mortgage lending. The stockmarket bust of the early 2000s unmasked the deceptions of the dotcom bonanza and the book-cooking at Enron, WorldCom and Global Crossing. Those with longer memories in Britain will

recall the Polly Peck and Maxwell scandals at the end of the go-go 1980s.

The next downturn seems likely to uncover a similar wave of corporate fraud. Fraud-busters concede that exactly where is hard to know in advance. Everyone has a favourite hunch. The rush to comply with the demands of environmental, social and governance (ESG) investing seems ripe for more imbroglios; in May German police raided the offices of DWS, an asset manager, over claims of greenwashing. The various

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government schemes to shore up businesses in the pandemic are another candidate. They were designed to be tapped quickly, so checks were by necessity lax. Evidence of fraud is already emerging.

The archetypal sin revealed by recession is accounting fraud. The big scandals play out like tragic dramas: when the plot twist arrives, it seems both surprising and inevitable. No simple formula exists to sort the number-fiddlers from the rest. But the field can be narrowed by searching within the "fraud triangle" of financial pressure, opportunity and rationalisation.

Start with pressure. This can be self-imposed. If you make the cover of *Business Genius Monthly*, in Mr Block's words, "the guy on the cover becomes your identity, the CEO of a high-flying firm." Fessing up that it isn't flying high becomes unthinkable. Often it is the result of external expectations, says Andi McNeal of the Association of Certified Fraud Examiners, a 90,000-strong professional body based in Texas.

The expectations to be met, or gamed, can be regulatory: think of how bankers pulled the wool over the eyes of their watchdogs before the financial crisis; or how Volkswagen deceived environmental agencies about the pollution from its cars in the "diesel-gate" scandal. For bosses of listed firms, the external eyes to please are often those of portfolio managers, analysts and traders—and the thing doing the pleasing is accounting earnings. The stockmarket uses profits as a rough guide ➤

► to how well a firm is doing and at what price its shares should change hands. Earnings "misses" can be punished brutally. The shares of Meta, owner of Facebook, lost 25% of their value after disappointing quarterly earnings last month. A lot of CEO pay is tied to share prices, creating the incentive to meet earnings forecasts.

That bosses feel pressure to deliver predictable profits is well documented. Almost all the 400 managers surveyed in the mid-2000s by John Graham, Campbell Harvey and Shiva Rajgopal, a trio of academics, confessed to a strong preference for smooth earnings. Most admitted they would delay big spending line items to meet a quarterly earnings target. More than a third said they would book revenues this quarter rather than the next, or incentivise customers to buy more earlier. The rewards for smoothing earnings have since grown. Investors attach rich valuations to the shares of dependable earners. Such "quality stocks" have sagged already (see chart). Some bosses will resort to fraud to avoid plummeting further.

Motive is not enough. The circumstances have to be right, too (or rather, wrong). Opportunity varies by jurisdiction. Where the rule of law is weak, scope to falsify accounts with impunity is wider. You should expect to find more book-cooking in emerging markets than in rich ones. Some short-sellers, such as Mr Block, examine Chinese firms listed abroad, whose accounts are hard for foreigners to verify. They landed a big target in 2020, when Luckin Coffee agreed to pay \$180m to settle accounting-fraud charges in America. India is another font of scandal.

In rich countries, opportunity beckons in the latitude of accounting practices. Earnings are a slippery concept. In a simple business, like a lemonade stand, profit is the difference between the cash coming in from sales and cash going out to buy lemons. Bigger businesses must account for non-cash items, or "accruals", such as sales that have been booked but not yet paid for. Accruals also include costs that will eventually be a drain on cash, but aren't yet: wear and tear (depreciation) of assets, pension payments, bad debts and so on. Accruals rely on a forecast or best guess of how things will turn out. "Accountancy is full of such estimates," says Steve Cooper, former board member of the International Accounting Standards Board, who now writes the *Footnotes Analyst*, a blog.

Accruals estimates can change for defensible reasons. Amazon Web Services, the e-emporium's cloud-computing division, said in February that it would extend the working life of its servers by a year, thus lowering its depreciation costs. This is perfectly legitimate. No one knows for sure the useful life of fixed assets, such as servers (or aircraft or office buildings).

Some less scrupulous firms, however, can time accruals changes to give earnings a bump, by bringing forward revenue to the present or deferring costs to the future.

Eventually, earnings must tally with cashflow. Firms that do not generate a lot of cash tend to pile on debt to disguise the fact. Corporate sleuths know this, which is one reason fraudsters go to great lengths to conceal their true debt burden. Another reason, powerful during recessions, is to avoid a downgrade from rating agencies, which would raise borrowing costs.

The side that completes the fraud triangle is rationalisation. Though some fraudsters are, as Mr Block points out, sociopaths who don't feel the need to justify themselves to anyone, fraud is likelier to occur if CEOs feel they can justify it to themselves. "Everybody does it" is something you might hear from the earnings-smoothers at the white-lie end of the accounts-fiddling spectrum. Some fraudsters tell themselves they are altruists, doing it to save jobs or investors. "This is just temporary" is another common rationalisation, says Ms McNeal.

Chef executives

Book-cooking can feel acceptable in a slump, in cases where the boss sincerely believes the business has good long-term prospects. This is what happened at one company. It was a classic story, says the executive who was brought in to clean up the mess. Business was good. The management believed they had found a recipe for success. They repeated this formula until long after it had stopped working. The pressure rose after recession struck. Costs were slashed in an effort to sustain profits. The cuts served only to hurt the business. Somehow reality had to be kept at bay. So the company began to fiddle its accounts.

How many such cases are thrown up by the next recession depends on its severity. It is easier to keep a fraudulent show on the road in a short downturn. In a prolonged one, a few sorts of corporate sinners are

likely to be unmasked. The least guilty type are firms that were run with a view to meeting accounting goals, but to the long-term detriment of the business. This group includes firms so obsessed with managing earnings that they skimped on investment in capacity, new products or brands, and firms that were so intent on managing costs that they destroyed valuable relationships with suppliers or employees.

A firm that pays too much attention to accounting measures of success is not committing fraud. But such a focus may be a gateway to dodger practices. Some high-flyers that suddenly lose altitude may decide to fiddle the numbers in the hope that the good times return. A loss of revenue is the likeliest trigger for fraud of this kind. The peculiar circumstances of the post-pandemic economy have now given rise to others, such as excess inventories or problems with suppliers going bust. The share prices of Walmart and Target fell sharply in May, after the two retailers revealed they had misjudged demand for some goods. Less honest firms may cover up mistakes of this kind rather than own up.

Then there are firms with no real business or not much of one. Wirecard, a much-feted German "fintech" firm that imploded in 2020, fits this category. So does Nikola, a startup with plans to make battery-powered lorries, whose founder, Trevor Milton, was found guilty last month by a federal court in New York of defrauding investors. By the cold light of recession, similar such examples will come to light. A lot of venture capital (vc), much of it undiscerning, has poured into untested enterprises in recent years. The valuations they were assigned in the boom years already look like fantasy; many of their business models will prove similarly fanciful.

Their vc backers may try to conceal such souring bets. Their fees are based on the value of their portfolio firms, whose equity is not frequently traded. That gives the vc fund managers wide discretion over the value (or "marks") they place on them. The same is true of private equity. Both vc firms and private-equity firms, which focus on mature businesses, are notoriously slow in writing down these values in bad times. When a fund matures, its sponsor must usually sell companies, at which point the market value ought to be clear. But these days a lot of private-asset "exits" are sales to other private funds, including some run by the same asset manager. Clubby arrangements of this kind invite abuse.

The slow-growth, low-rate 2010s were a favourable climate for fraud to breed. Financial pressure, opportunity and rationalisation no doubt became aligned in at least a few instances. Everybody does it? Maybe. But even the "smoothing" that seems acceptable in a boom will be judged harshly in a bust. ■

The stockmarket polygraph

MSCI Quality indices*

12-month forward price-to-earnings ratio



*Comprising companies with a high return on equity, stable earnings growth and low financial leverage

Source: Refinitiv Datastream

Logistics

Feeling the AdBlues

BERLIN

A series of shortages threatens Europe's supply chains

"**L**ORRIES ARE vital for the transport of almost everything in Europe," says Raluca Marian of the International Road Transport Union (IRU) in Brussels. Three-quarters of all goods in the EU travel by lorry. If half the bloc's 6.2m heavy-duty vehicles (HDVs) cannot function, supermarket shelves will be empty within days and essential services reliant on ambulances and fire engines will break down. That could happen if stocks of AdBlue, a mix of urea and deionised water that neutralises nitric-oxide emissions from diesel engines, are depleted. As many as 4m European lorries are programmed to stop after a few kilometres without AdBlue.

In August skw Stickstoffwerke Piestritz, a chemicals company in eastern Germany that makes about 40% of the country's supply of AdBlue, stopped production because of exorbitant gas prices. The firm said it was losing €100m (\$100m) a month. In September skw restarted 45% of its production after gas prices came down a bit. But the damage was done.

Constrained supply and higher costs for the two remaining big producers, BASF of Germany and Yara of Norway, pushed the price of a litre of AdBlue to €1.20, up from just 17 cents in August 2021. In an open letter to Robert Habeck, Germany's economy minister, and Volker Wissing, the transport minister, the chairman of Netzwerk Logistik Mitteldeutschland, a logistics group, lamented that for a haulage firm with a few hundred lorries this translates to extra annual costs of €500,000.

The shortage of AdBlue is the latest blow to German trucking, which is already suffering from high fuel prices and a dearth of truckers. "We are short of 100,000 lorry drivers in Germany," worries Dirk Engelhardt, head of the BGL, a haulage-industry association. Across Europe 10% of vacancies are unfilled, says the IRU, equivalent to 425,000 people. Most of the tens of thousands of European truckers who retire every year are not replaced. Off-putting working conditions and the difficulty of combining the job with stable family life is discouraging youngsters and women (who make up just 3% of lorry drivers in Europe) from taking the wheel.

Ms Marian wants the European Commission to recognise AdBlue as an "essential product without which logistics chains would stop". Such a designation could require the chemical's EU-wide availability



Speeding towards a bottleneck

to be monitored. She also suggests creating official AdBlue reserves. This seems like a long shot. But even if Ms Marian does not get her way, the shortage of AdBlue may ease once gas-price brakes and other government schemes to mitigate the energy crisis enter into force around the EU. The shortage of drivers will be harder to solve. A first step would be to make becoming a driver easier and cheaper: getting an HDV licence in Germany takes three years and costs up to €13,000, a big hurdle for most jobseekers. The exam is not available in Ukrainian or Turkish, languages spoken by immigrants who might otherwise be tempted by the profession's decent pay. ■

Sportswear

Trainer trouble

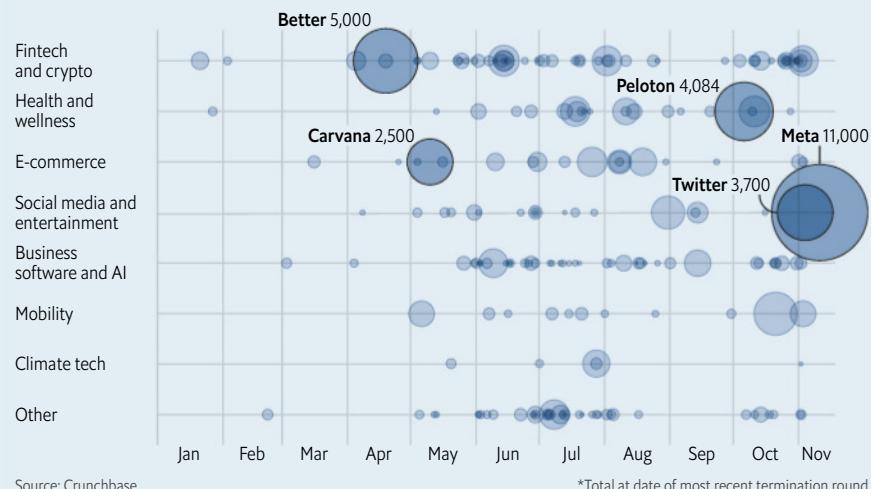
The industry's giants are running into hurdles

FOllowing a series of anti-Semitic outbursts in October, Kanye West, a rapper and fashion entrepreneur (who insists on being called Ye), bragged that Adidas would never get rid of him. Within days, the German sportswear giant proved him wrong, ending a lucrative seven-year relationship. Mr West's line of Yeezy sneakers added €1.5bn (\$1.5bn) to Adidas's revenues in 2021, or 12% of its entire shoe business. After the announcement, the company's share price fell to lows unseen since 2016. On November 9th Adidas cut its profit forecast for the fourth time this year. The previous day it had named a new chief executive, Björn Gulden, to clean up the mess.

Mr Gulden, who had helped turn round Adidas's German arch-rival, Puma, will have to deal with more than just misbehaving pop stars. Much like the rest of the global sportswear industry, which earns revenues of \$300bn a year, Adidas is battling post-pandemic supply-chain glitches, inflation-fuelled cost increases and an economic slowdown in its biggest markets. Even the football World Cup, which kicks off on November 20th in Qatar, is unlikely

The sack of Silicon Valley

Technology companies, reported lay-offs*, 2022



Rebooting the system

On November 9th Meta said it would fire 11,000 people, or 13% of its workforce. It is not the only tech firm to give its workers the boot, as the sector goes through a harsh downturn. A week earlier Stripe, a fintech firm, announced it would cut 14% of its staff; Twitter's new owner, Elon Musk, fired half its personnel. According to Crunchbase, a data provider, more than 60,000 American techies have been shown the door this year.



Three stripes and you are out

► to offer the usual sales boost, as many shoppers pinch pennies.

Sportswear firms' most immediate problem concerns their inventories. As quarantined consumers snapped up hoodies and tracksuit bottoms, the companies ramped up production of athleisure wear. In June last year Nike, the industry's American heavyweight, confidently forecast annual revenue growth of 10% or so until 2025 and sales that year of \$50bn. Instead, the firm is slashing prices to dump unsold stock. It now expects revenues to grow by 5% or so a year.

A longer-term problem is managing the move away from sports and towards fashion. Besides making the companies vulnerable to the whims of mercurial pop stars, this has exposed them to competition at both the fashionable end of the market, where luxury labels are peddling trainers, and at the sporting end, where rookie firms offer innovative products that appeal to buyers' evolving sensibilities about both athletic performance and matters like the environment. On Running, a Swiss brand in which Roger Federer, a tennis legend, owns a stake, makes its footwear from beans and has launched a subscription service to replace and recycle well-worn kicks. In March Lululemon Athletica, an athleisure label, launched its first footwear collection. HOKA claims to have reinvented the running shoe with its signature chunky cushioning.

Still, the contest in the fashion market looks like more of a struggle for companies that made their names on the field rather than on the catwalk, notes John Kernan of Cowen, an investment bank. Some are already returning to their sporting roots. Puma's success under Mr Gulden, a former professional footballer in his native Norway, has a lot to do with focusing on kit for underserved sports, such as cricket and motor racing. Adidas will be hoping for similarly fancy footwork. ■

Fossil fuels

Freedom lighters

CORPUS CHRISTI

American liquefied natural gas could ease the global energy crunch. Eventually

ONE CARGO of LNG heats 1m people in Europe for a month," beams an employee of Cheniere, America's biggest exporter of liquefied natural gas, pointing to a specialised vessel docked at its huge export terminal in Corpus Christi, Texas. The firm has poured \$17bn into the facility and in October held a groundbreaking ceremony to mark an additional \$8bn expansion. More LNG sets sail from Cheniere's even bigger plant in Louisiana.

When Donald Trump's administration vowed in 2019 to spread "freedom gas throughout the world", it sounded like overwrought rhetoric. Now, especially to European ears, it sounds mellifluous. Russia has choked off supply in response to Western sanctions imposed after its invasion of Ukraine. Although current prices have come down from their peaks, thanks in part to mild weather, European countries are seeking ways to replace Russian fuel. Freedom gas looks just the ticket.

America's Energy Information Administration (EIA) calculates that the volume of American LNG exports rose by 12% in the first half of 2022, year on year, to the equivalent of 57bn cubic metres (bcm) when regasified. Nearly two-thirds went to Europe, up from roughly a third of the total in all of 2021. America has shot past Australia and Qatar to become the world's largest LNG exporter. A deal agreed to in March by America and the EU calls for an extra 50bcm per year of American LNG to flow to Europe this decade. On November 7th the *Daily Telegraph*, a British newspaper, reported that

Britain and America were about to announce a big LNG deal after the UN climate summit taking place in Egypt.

If American LNG boosters have their way, that is just the start. Toby Rice, boss of EQT, America's biggest producer of natural gas, wants his country to quadruple its LNG export capacity by 2030, to 1.6bcm per day. He argues this would not only ease the energy crisis but even, if that gas is used to displace dirtier coal plants in the developing world, combat climate change. Turning America into a lasting LNG superpower will be harder to pull off than this year's one-off surge. Can it happen?

America has lots of gas. By the EIA's reckoning, known reserves that are recoverable using existing methods will last another century at current rates of production. A lot sits in shale beneath Appalachia, home to two of the world's biggest gasfields. One of them, the Marcellus, is bigger than the ten largest conventional gasfields combined. American LNG firms also have lots of ambition, dwarfing even Qatar's \$50bn plan to increase its export capacity by nearly two-thirds in the next five years. Roughly half of the world's LNG projects under construction or proposed to be built by 2030 are in America (see chart 1).

The industry is also, by its risk-averse standards, innovating furiously. One firm, Venture Global, has pioneered the use of modular liquefaction equipment that is made in a factory and shipped to the site of the project. At a shipyard not far from Cheniere's terminal in Corpus Christi, a start-►

Step on the gas

Liquefied-natural-gas exports, tonnes m

United States

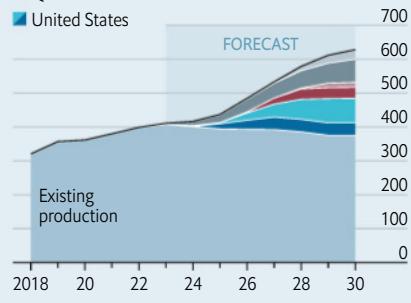


Sources: Cedigaz; Rystad Energy

World

■ Rest of world ■ Planned ■ Under development

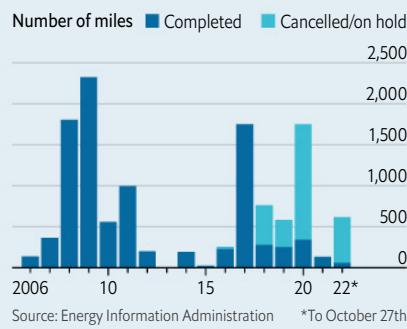
■ Qatar ■ United States



1

Cancel culture

United States, interstate
natural-gas pipeline projects



Source: Energy Information Administration

2
Number of miles Completed Cancelled/on hold

2,500
2,000
1,500
1,000
500
0
2006 10 15 20 22*

*To October 27th

▶ up called New Fortress Energy is building “fast LNG” liquefier units that can be installed on old ships or rigs. That helps cut the necessary capital spending from billions to \$700m-\$800m apiece.

Rod Christie of Baker Hughes, an energy-services firm, explains that the modular approach can shave up to two years off on-site construction, which can take five years or more. Venture Global is completing its first facility in record time. In May it secured some \$13bn in fresh money to build a giant new one in Louisiana; it should be ready to ship gas by 2024. New Fortress’s boss, Wes Edens, says his firm can get smaller LNG terminals up and running “in roughly half the time at roughly two-thirds the cost” of the conventional approach.

In order for America’s potent mix of natural riches, powerful incumbents and plucky entrepreneurs to translate into LNG superpowerdom, the industry must still overcome three obstacles. The first is Wall Street standing in the way of getting more gas out of the ground. Investors are traumatised by the decade-long boom-and-bust cycle in which shale-drillers burned through more than \$150bn in cumulative free cashflow from 2011 to 2020. They have

been urging energy bosses to return record profits to investors rather than build new capacity. And the bosses have listened. Pioneer Natural Resources, a big shale producer, offers a dividend yield of 12.4%, up from 1.4% last year. Another, Chesapeake Energy, has doubled its share-buyback scheme. The shalemen have also paid back \$26bn in debt. They are showing no signs of relaxing this newfound capital discipline.

If gas prices stay high the incentive to drill, baby, drill may one day become irresistible. Yet even then, the LNG firms must get the gas from the wellhead to the liquefiers. Matt Palmer of S&P Global, a research firm, thinks America could double its LNG exports by the late 2020s using its existing pipelines and relying on gas from fields, such as those in the Permian basin in Texas, that are close to the Gulf coast’s terminals (see map). A bigger expansion would require more fuel to flow south from landlocked Appalachia. Since 2016 several pipeline projects have been scotched because of permit hassles and opposition from anti-pipeline activists (see chart 2).

The last obstacle arises from, of all places, Europe. Because LNG projects are risky and capital-intensive, creditors will not lend billions to finance them unless the borrowers can show long-term contracts that guarantee cashflows from which the debt can be serviced. Buyers in Japan and South Korea are happily signing such agreements, thanks in part to regulations that promise to compensate them if gas prices crater. But demand from Asia alone is not enough to justify large expenditures on new LNG capacity in America.

Despite the EU’s scramble to replace lost Russian gas, only four power companies in Europe have signed long-term gas deals with American exporters this year, reckons Leslie Palti-Guzman of GasVista, a research firm. Many others worry that the EU’s ambitious climate policies portend an eventual crackdown on the use of gas, which

though cleaner than other fossil fuels still emits carbon when burned.

“Nobody knows what the EU’s gas demand will be after 2030,” says David Goldwyn, an energy expert. And in contrast to Asia, liberalised European energy markets expose the buyers to price swings. Amid such uncertainty it is hard to blame Europe’s utilities for feeling skittish about signing 20-year contracts. American LNG can ride to Europe’s rescue. But in order for more Chenieres, New Fortresses and Venture Globals to step up, more Europeans need to sign on the dotted line. ■

Business and climate change**Wake up, boss!**

SHARM EL-SHEIKH

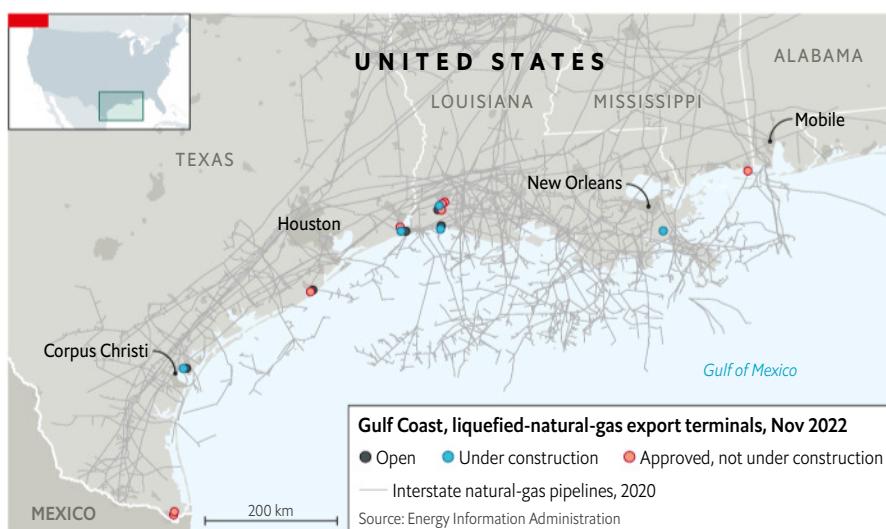
The UN takes on corporate greenwashing

READERS LOOKING for thrills rarely turn to official reports written by groups of worthies. At first glance, one from a body soporifically named the UN High-Level Expert Group on the Net-Zero Emissions Commitments of Non-State Entities might be expected to cure insomnia. The team of experts, led by Catherine McKenna, a former Canadian minister, has spent the past seven months poring over the proliferating climate commitments of banks and big businesses, as well as cities and regions.

Yawn? Not a bit of it. The group’s conclusions, presented to the UN Secretary General on November 8th at the annual climate summit taking place in Egypt, made both CEOs and activists sit up. In her opening letter, the refreshingly direct Ms McKenna set the tone: “It’s time to draw a red line around greenwashing.”

Many companies are making bold promises to reduce their emissions of greenhouse gases to zero. According to Accenture, a consultancy, around one-third of the world’s 2,000 biggest firms by revenue now have publicly stated net-zero goals. Of those, however, 93% have no chance of achieving their targets without doing much more than they are at the moment. Few businesses lay out credible investment plans or specify milestones against which progress can be judged.

In order to curb such “dishonest climate accounting”, the report urges companies to make public disclosures of their progress towards decarbonisation using verified and comparable data. It implores regulators to make these disclosures mandatory. In addition, the authors say, firms should not claim to be net-zero while investing in new fossil-fuel supplies (which puts many investment funds in a bind) nor



► rely on reporting the intensity of emissions (per unit of output) rather than their absolute volume. And organisations making green claims must not simultaneously lobby against climate policies.

All very bracing, and perfectly sensible. Will business take it to heart? The UN has no authority to enforce any of the recommendations. The idea that increased scrutiny will inevitably lead to better behaviour remains untested. It is all too easy to imagine that it might instead lead to what you might call green-hushing. A survey of some 1,200 big firms in 12 countries by

South Pole, a climate consultancy, found that a quarter have set themselves stringent emission-reduction targets but do not intend to publicise them. Some companies are staying quiet to avoid attracting the ire of conservative politicians in places such as Texas, who decry "woke" corporations. Others, particularly in progressive redoubts like Europe, fear activist ire for not meeting targets quickly enough.

Many state entities are not helping—and not only because they shy away from policies with bite, such as carbon taxes. The day after Ms McKenna set out her red

lines, the American government launched a new scheme to spur large companies in rich countries to purchase carbon credits from developing countries that expand their renewable-power-generation capacity. In theory, this could bring much-needed capital to the urgent task of scaling up clean energy in emerging markets. In practice, worries Chris Cote of MSCI, a research firm, it will be hard to tell if a given project would have been financed even without inducements from deep-pocketed multinationals. Without proper oversight, that could mean more greenwash, not less. ■

Bartleby The bird and the boss

A billionaire's challenge to management thinking

EON MUSK's takeover of Twitter raises questions of policy: is it right for the world's richest man to own such an important forum for public debate? It raises issues of law: is his decision to get rid of so many workers within days of completing the acquisition above board? And it raises questions of strategy: can Twitter make money by moving from a business model based on advertising to one based on subscription? But it is also an extremely public test of a particular style of management. In the way he thinks about work, decision-making and the role of the CEO, Mr Musk is swimming against the tide.

His attitude to employees is an obvious example of his counter-cultural approach. For a futurist, Mr Musk is a very old-fashioned boss. He doesn't like remote work. Earlier this year he sent an email to employees at Tesla demanding that they come to the office for at least 40 hours a week. Anyone who thought this was antiquated could "pretend to work somewhere else", he tweeted.

Whatever the legality of his decision to fire so many Twitter workers, his methods are brutal: people locked out of corporate IT accounts, careers ended with an impersonal email, half the workforce gone at a stroke. It is as if Thanos had decided to try his hand at business. For those who remain, hard graft is the expectation; insiders say that one of Mr Musk's first acts at the firm was to cancel monthly firm-wide "days of rest". The template for the modern manager tends to be a low-ego, compassionate boss who gives people autonomy. Someone didn't get the memo.

His critics have to accept that the my-way-or-the-highway approach has worked before. At his other firms, like Tesla and SpaceX, Mr Musk may not have

offered empathy but he has provided a planet-sized sense of purpose, from popularising electric vehicles to colonising Mars. Whether this can work for him at Twitter is less clear. His vision for the product as a "digital town square" where free speech flourishes is a typically grand one. This time, however, he is not taking on lumbering incumbents, but fixing an existing business where judgment and politics matter as much as engineering.

The way that Mr Musk takes decisions also cuts across consensus. Comparatively little research has been done on how CEOs make their choices, but a Harvard Business School working paper published in 2020 had a bash by asking 262 of the school's own alumni how they went about making strategy.

The authors of the paper did discover a wide range of approaches, with some managers going on gut instinct and others using very formalised processes. But the researchers found that bosses who use more structured processes tend to lead bigger and faster-growing firms (which way causality runs is not clear). They also

tend to make decisions more slowly. Mr Musk and his acolytes are in a different camp: fast, informal and aggressive. Reports are already surfacing of fired Twitter workers being asked to come back.

He is unorthodox in another way, too. Peter Drucker, a doyen among management thinkers, described the CEO as being the person in the organisation who bridges the outside world and the inner workings of the company. No one else in the firm is in a position to combine these perspectives, Mr Drucker wrote.

Mr Musk is not so much bridging this gap as making the distinction between the inside and outside of the company irrelevant. His personal brand and wealth is inextricably linked with the other firms he runs. At Twitter he is going even further, tossing out product ideas on his own Twitter feed, polling the audience for their views and offering real-time commentary on how things are going. And Twitter itself is a platform on which everyone—users, ex-employees, the people who founded the firm, policy-makers and pundits—weighs in publicly to say how things are going. There is not much of an inside to talk of.

You might object that Mr Musk is a one-off, and so is this deal. When he first made his offer to buy Twitter, he explicitly said that it was not because of an economic rationale. He later tried to wriggle out of the transaction entirely. The story of a billionaire owner of a social-media platform has little in common with the challenges that preoccupy the salaried executives of most public firms. Maybe so, but if Mr Musk makes another success of his latest venture by being brutal to his workforce, skipping the PowerPoint sessions and managing through memes, the MBA will still need a bit of an update.



Schumpeter | Command and control

Even with political gridlock, America Inc still has much to fear from the bossy state



IN 1922 VLADIMIR LENIN, criticised by Communist militants for tolerating a minuscule role for the private sector in Bolshevik Russia, insisted that it was a reasonable trade-off because the state would still control “the commanding heights” of the economy. For much of the rest of the 20th century that phrase came to stand for state meddling—not a complete clampdown on private markets, but preference for a dominant economic role played by the mandarins of the public sector.

In the 1980s that changed. For most of the period since then it was market forces, rather than the state, that were in the ascendancy across the West, even when centre-left governments remained in power. But Daniel Yergin, who co-authored a book called “Commanding Heights” in 2002, argues that the concept is back. President Joe Biden’s spending bills on infrastructure, semiconductors and the climate seek to use industrial policy to strengthen investment in America and counter geopolitical competition from China. His government has a left-wing regulatory zeal not seen in generations. “The hand of the regulatory state has become stronger,” asserts Mr Yergin, who is also vice-chairman of S&P Global, a research firm.

For such reasons, the prospect of gridlock as Republicans appear on track to narrowly regain the House of Representatives in midterm elections on November 8th will probably be salutary for business, even if the Grand Old Party fails to make the sweeping gains in the Senate that some had predicted. If nothing else, it will prevent yet more big spending, potentially reducing upward pressure on inflation and interest rates.

Yet the election results are not an unalloyed win for America Inc. Although political paralysis in Washington may constrain the more progressive wing of the Democratic Party and the globophobe populists among the Republicans, there is little that centrists can do in the short run to stem the regulatory tide. Moreover, results in state races portray a country split into conflicting ideological camps. Whether in red states like Florida and Texas or blue ones like California, governments are increasingly keen to boss businesses about. Corporations struggle to straddle the chasm.

Even before the final vote counts roll in, the post-electoral picture for corporate America is already pretty clear on taxes. Repub-

lican control of the House would take two immediate concerns off the table. The first is the White House’s ambition to push through corporate-tax increases, windfall taxes on oil firms, or both. The second allied concern is that of a new fiscal splurge. Granted, many consumer-facing firms benefited from the fillip to households that came from Mr Biden’s \$1.9trn American Rescue Plan in March 2021. Others, such as construction-equipment firms, logistics operators, chipmakers and clean-energy companies, are likely to benefit from the \$1.7trn trio of spending bills pushed through by the Biden administration in the past year. With annual inflation running at above 8%, however, more spending, if debt-financed, would be dangerous. It would push up wages and other costs.

Matters are blurrier when it comes to the regulatory state. Even if the right wins control of both chambers, Mr Biden would veto any attempts to arrest his sharp shift to the left on matters like competition policy; the Federal Trade Commission is gearing up for some high-profile cases, including an antitrust trial against Meta, Facebook’s corporate parent, expected to begin in December 2023. With control of at least one chamber, the Republicans can make mischief, summoning regulators to Capitol Hill, or turning down agencies’ requests for more money. They are cross about some issues that many big businesses also seethe about, such as the attempts by the Securities and Exchange Commission, a financial regulator, to demand finicky emissions disclosures.

In other important ways, though, the party that used to treat corporate America as a bedfellow has started to disown it. Like Democrats, though for different reasons, Republicans want to cut big tech down to size. Just as Donald Trump courted blue-collar voters, some of his most notable acolytes have espoused causes that are anathema to big business, such as higher wages and workers’ councils, while turning against laissez-faire favourites like globalisation and immigration. In the end it may be the courts, not the Republicans, that prove to be the last bulwark against overweening regulators.

Business may have the most difficulty keeping interventionism at bay in the states. With Washington gridlocked, states are turning into strongholds of ideological unity and taking matters into their own hands. In the run-up to the elections, only 12 of the 50 states had divided governments, notes Neil Bradley of the US Chamber of Commerce, America Inc’s main lobby group. That emboldens them to interfere in what used to be considered internal corporate affairs, from the “wokery” of CEOs to investments, lending policies and the size of share buy-backs. Companies are left in the tricky position of trying to appease both deep-red and deep-blue states at the same time. As Mr Bradley puts it, they are seeing “Texas telling them they have to do one thing and California telling them they have to do the opposite”.

Taking the Mickey

One way for businesses to cope is to keep their heads down and their noses out of politics. The consequences of misreading local political moods can be severe. Just ask Disney, whose run-in with Ron DeSantis, Florida’s governor, may be all the costlier after his thumping re-election win puts him in pole position to challenge Mr Trump for the Republican presidential nomination in 2024. Alternatively, firms could lobby the federal government for a single set of rules in areas such as greenery or data privacy, even if these are not all to their liking. That would help clear the state-by-state minefield. It is also fanciful in an era of gridlock. From the commanding heights of Bolshevik heaven, Lenin must be laughing. ■



Cryptocurrencies

Bankman fried

WASHINGTON, DC

The fall of FTX and SBF plunges crypto into serious trouble

LAST WEEK Sam Bankman-Fried was the most important person in crypto. The floppy-haired 30-year-old former billionaire, who goes by SBF, is the founder of FTX, then the industry's third-largest exchange. When crypto prices collapsed earlier this year he swooped in with loans for Voyager and BlockFi, handing the lending ventures hundreds of millions of dollars, and snapped up assets from Three Arrows, a crypto hedge fund. Many saw a new John Pierpont Morgan, the banker who saved the American financial system in 1907.

Mr Bankman-Fried also spent millions of dollars from his vast fortune, worth \$26bn at its peak, supporting political campaigns on crypto regulation. He planned to give away much of the rest, having endorsed effective altruism, a movement that espouses charitable giving to safeguard humanity's future. Politically engaged, seemingly altruistic, decidedly not a crypto bro: many thought SBF was the man who could save the industry from itself, a reputation he hardly discouraged.

Oh, how the mighty have fallen. After rumours FTX might be insufficiently liquid began to swirl, customers pulled \$650m of assets from the exchange on November 7th, before it stopped meeting requests. The value of an FTX Token, a mechanism for sharing the firm's profits, has fallen by 90% since November 4th (see chart on next page). On November 8th Mr Bankman-Fried and Changpeng Zhao, the boss of Binance, the biggest crypto exchange, announced that Mr Zhao's firm had signed a letter of intent to buy FTX. Then the next day Binance pulled out, after having taken a look at FTX's books. Mr Bankman-Fried is reported to have told investors that FTX faces an \$8bn shortfall and that it will, without more capital, go bankrupt. According to Bloomberg Wealth, he is now worth less than \$1bn, a drop of 94%—the biggest single-day fall on record.

The carnage is spreading to other parts of the industry. Bitcoin has tumbled by 19% since November 8th, to \$16,600 at the time of writing. The importance of FTX for the

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wider ecosystem is such that JPMorgan Chase, a bank, has warned crypto markets could face a "cascade" of deleveraging and company failures, and that there is a shrinking pool of strong institutions able to step in to rescue those in trouble. The reputational damage to the industry looks likely to be profound.

What on earth happened? Two stories circulated, both a touch Shakespearean. The first is one of rivalry and the second of hubris. Start with the rivalry between Mr Bankman-Fried and Mr Zhao. Mr Bankman-Fried owns three firms: FTX, a global exchange; FTX.US, an American exchange; and Alameda Research, a crypto-trading fund. In theory, these are separate entities. But the connection between Alameda and FTX has long been unclear. On November 2nd CoinDesk, a news website, reported that tokens issued by FTX made up two-fifths of Alameda's assets, and were worth \$5.8bn. That sum was almost double the market capitalisation of the tokens, and a slice was marked as collateral, raising concerns that Alameda had borrowed against them, possibly from FTX itself. Apparently in response, Mr Zhao tweeted he would liquidate Binance's holdings of FTX tokens, then worth over half a billion dollars.

That he later moved to snap up the firm led many to believe he had orchestrated the chaos—casting doubt on FTX in order to set off a fire sale. It seemed a plausible story. There is little love lost between Mr ➤

▶ Bankman-Fried and the less-celebrated Mr Zhao. The Binance boss has long claimed his firm is headquartered "nowhere". It is banned from providing some services in countries including Britain, owing to a lack of information about compliance with regulations. Mr Bankman-Fried has reportedly goaded Mr Zhao about this.

But the apparent size of the hole in FTX's balance-sheet indicates problems ran far deeper than a rival starting rumours. The details of what went wrong in the beanbag-strewn offices of FTX and Alameda are not yet clear. An exchange, which sits between buyer and seller and takes a spread, should not be an easy business to bankrupt. It is not typically exposed to runs, since it merely holds assets on behalf of investors.

Problems can emerge, though, when such firms make loans, allowing customers to buy "on margin", or lend out crypto tokens they hold on behalf of investors in exchange for collateral, like cash or other tokens. FTX seems to have allowed Alameda to borrow customers' assets by posting FTX tokens (issued by the exchange itself) as collateral. As FTX tokens fell in value, the firm no longer had enough assets to cover the liabilities it owed to customers, causing a downward spiral. In coming up with its wealth estimates, Bloomberg assumes both Alameda and FTX are now worth just \$1. Sequoia, a venture-capital firm, has told investors it has written down its stake in the exchange to zero.

Reports on November 9th suggested that the Securities and Exchange Commission, America's top financial regulator, had months ago launched a probe into FTX's handling of funds, as well as the connections between Mr Bankman-Fried's firms. America's Justice Department is also reported to be investigating the firm. FTX has not yet commented on either story.

The fallout will have wider consequences. The crypto winter had previously claimed only the types of victims that would be expected, including a poorly designed stablecoin, a hedge fund and several platforms that made risky loans. That it

has come for FTX, a well-regarded business, and Mr Bankman-Fried is an enormous blow. It has left other institutions scrambling to reassure customers. Coinbase, a large exchange, has sent out reassuring missives to the press. Its share price has nevertheless shed a fifth of its value in recent days, and is close to all-time lows.

The collapse of FTX may be enough to reverse the embrace of crypto by institutions, ordinary folk and the occasional government. Institutional investors including Temasek, a Singaporean wealth fund; SoftBank, a Japanese tech-investing group; and Ontario Teachers' Pension Plan, a Canadian fund, had all dipped their toes into the industry by buying stakes in FTX. Legislators will now eye crypto with even deeper suspicion. Whatever the precise cause of FTX's implosion, the story is already a tragedy for the industry. ■

Climate change

Green light

COALBROOKDALE AND SHARM EL-SHEIKH

Economic growth no longer means higher carbon emissions

IF ANYWHERE CAN claim to be the birthplace of the Industrial Revolution it is Coalbrookdale, a pretty village in England's West Midlands. In 1709 Abraham Darby, a local merchant, leased a foundry and fed the furnace with coking coal, rather than charcoal made from wood. The use of the fossil fuel meant he could make pig iron much more cheaply, and cast it into pots, pans and cauldrons for cooking—the kind of low-cost manufactured goods that would, over the next three centuries, produce an unprecedented rise in living standards across the world.

Darby's furnace was not just ground zero for the Industrial Revolution. It was also ground zero for global warming. Since the fateful smelting, economic output and greenhouse-gas emissions have risen in tandem. England's furnaces were joined by coal-powered railways and steam-powered textile mills, all using tools cast from coke-fuelled foundries. Between the middle of the 19th century and the outbreak of the first world war, Britain's national income per person more than doubled and its carbon emissions increased four-fold. When other countries industrialised, their emissions spiralled, too.

As politicians gather in Sharm el-Sheikh, an Egyptian holiday resort, to review progress on climate change at COP27, there is at least one cause for optimism: the historic link between rising prosperity and carbon emissions has been broken.

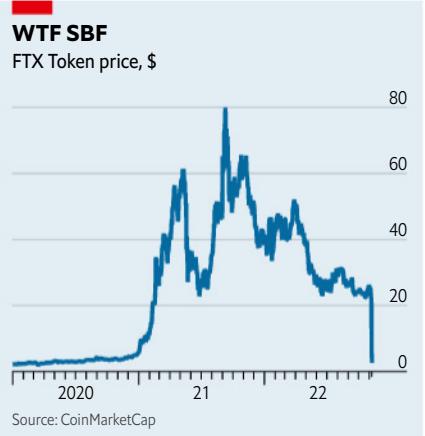
Today Britain is a member of a large and growing group of rich and middle-income countries that has severed it. This decoupling has been achieved not through the large-scale deployment of renewable energy—or, indeed, by exporting emissions to poorer countries—but by a change in the relationship between economic growth and energy that is perhaps as significant as those first stirrings of the Industrial Revolution three centuries ago.

All told, some 33 countries have in recent years cut emissions while maintaining growth. Around three-fifths are European, meaning, as was the case during the Industrial Revolution, the old continent is leading the way. But the group also includes America, where emissions fell by 15% between 2007 and 2019 even as GDP per person rose by 23%, as well as others that have joined more recently. These include Australia, where emissions have fallen by 9% since peaking in 2012, and Israel, where they have fallen by 12% in the same period, even as both economies have grown.

It would be wrong, however, to characterise decoupling as a luxury reserved for the most affluent countries. Thanks to energy-efficiency improvements, emissions in eastern Europe have fallen since the collapse of the Soviet Union, at the same time as living standards have converged with western Europe. Argentina, Mexico and Uruguay have also joined the decouplers. In Mexico, for instance, emissions have fallen by 16% since their peak in 2012. Around the world, before the covid-19 pandemic distorted the numbers, more than 1bn people lived in countries with falling emissions and growing economies.

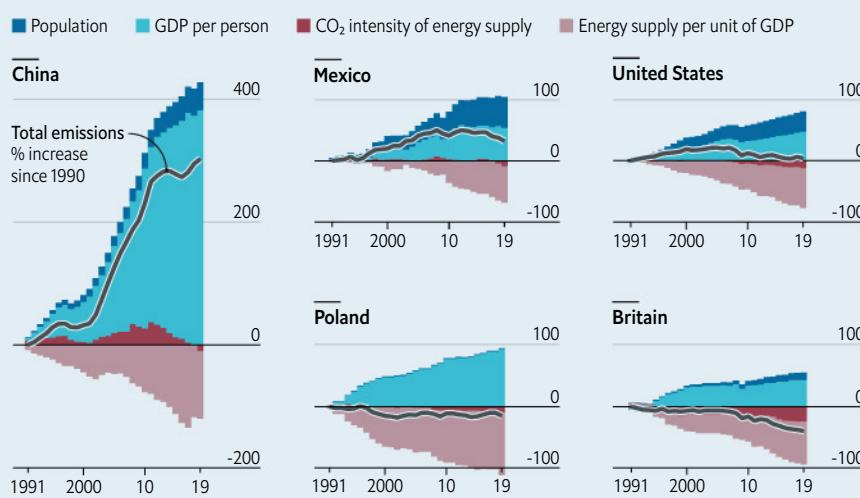
Territorial emissions, which reflect domestic production, began to fall much earlier. In Britain they peaked in the 1970s, before oil shocks and strikes decimated the country's industry. But their decline merely reflected the fact that more manufacturing was taking place abroad: British clothes were being sewn in Dhaka instead of Derby, which led to no reduction in global emissions. The figures in this article mostly come from analysis of data produced by the Global Carbon Project, a greenhouse-gas-monitoring outfit. These include estimates of the emissions from imports, and so capture the vast majority of a country's carbon footprint. In other words, Britain's figures include emissions from imported t-shirts made in Bangladesh.

The more recent decline in emissions is therefore the real deal. Part of the explanation is that the countries to which manufacturing has been outsourced now emit less carbon themselves, notes Viktoras Kujonius of Pictet Asset Management. In all but a couple of dozen industrialising countries GDP growth produces fewer carbon emissions than used to be the case, a phenomenon which is known as "relative de-



Going down well

Contribution to territorial greenhouse-gas emissions, CO₂ equivalent, percentage-point change since 1990



Sources: Penn World Table; Global Carbon Project; IEA; UN; "Drivers of declining CO₂ emissions in 18 developed economies", by C. Le Quéré et al., 2019

coupling". In 2008 China's exported emissions peaked at around 1.5bn tonnes of carbon-dioxide equivalent, before falling to 1bn in 2019, owing to improved efficiency and a move from chemicals and metals exports to less carbon-intensive electronics ones. Emissions imported by the OECD group of mostly rich countries peaked in 2006, at 2bn tonnes of carbon-dioxide equivalent. They have since fallen by more than a third to 1.3bn.

But the shift mostly reflects a watershed change in how energy is used in the West. Decoupling can occur for two reasons: either because output becomes less energy-intensive, or because the energy used becomes greener. For the past decade or so, it has mostly happened because of the former. The energy intensity of GDP—the supply needed to produce a dollar of national income—has fallen faster than GDP has grown. This can be seen in America. The country is often considered a polluter *par excellence*. In fact, its territorial emissions peaked in 2005. Since then, the energy intensity of its GDP has fallen by nearly a quarter. So even though America's GDP has risen by 29%, emissions have fallen by 15%. Similarly, four-fifths of the fall in German emissions since 1990 reflects lower energy intensity. Only the remaining fifth comes from the use of greener energy.

Falling energy intensity is the result of changes to the structure of rich-world economies. A visitor to Coalbrookdale in the 18th century compared its smoke, heat and fire to a vision of hell. Nowadays the old furnace lies cold; the last foundry, which made parts for Aga ovens, closed in 2017; and the site has become a tourist attraction. It is a symbol of Britain's shift from an industrial economy to a service-based economy—a shift which has big im-

plications for emissions. As Nick Eyre, a climate-policy expert at the University of Oxford, notes, an extra trip to the theatre requires much less energy than making additional pots and pans.

The move from manufacturing to services has happened across the rich world. Industry's share of American GDP fell from 17% in 2007 to 14% by 2019. In Germany, a country known for its manufacturing prowess, its share fell by two percentage points in the same period. Even in Mexico, one of the poorer countries to have decoupled, its share dropped from 27% to 25%.

The task now is to accelerate decoupling. One reason for optimism is that so far it has happened without colossal outlays or much political consensus. Many of the West's high achievers have emissions-trading schemes, or other forms of carbon pricing, but even laggards have managed to reduce their carbon footprints. Increasing use of renewables in electricity generation, as well as electrifying the heating of homes and transport—whether through electric cars or encouraging public transport—has the potential to make a big difference.

But perhaps the greatest reason for optimism is the evidence that poorer countries are industrialising in different ways from their predecessors. Data from the Global Carbon Project suggest that Egypt, the COP27 host, reached peak emissions in 2017. India and Vietnam, which are becoming a bigger source of exports as trade shifts away from China (see story at end of section), are considerably greener than their economic rival. In 2007, when China's economy was roughly as big as India's is today, it emitted around twice as much carbon dioxide. India and Vietnam are still powered by coal. The difference is they are making much more efficient use of it. ■

The Chinese economy

Another marathon

HONG KONG

Financial markets bet on an end to China's "zero-covid" policy

IS CHINA ABOUT to abandon its struggle with covid-19? Judging by recent moves in the markets, you might think so. Rumours that China had assembled a reopening committee inspired a big rally in the country's shares, the offshore yuan and even the price of copper in the early days of this month. A social-media message that helped circulate the idea was subsequently dubbed the "trillion-dollar" tweet.

If nothing else, the market movements were a reminder of the costs of China's "zero-covid" strategy, which requires mass testing and frequent lockdowns to stamp out the disease. Few policies are so economically damaging that mere rumours of their repeal can create so much wealth so quickly. A reopening could lift the value of China's shares by 20% or \$2.6trn, according to Goldman Sachs, a bank. Because China is the only big economy still prone to lockdowns, it is the last opportunity for investors to profit from a reopening rally. These tend to happen early and fast, which is why investors risk jumping the gun.

Optimists point out China is taking modest steps to become more open. Its aviation regulator has more than doubled the international flights planned for the next few months, compared with a year ago. China may shorten the quarantine for incoming travellers, and abandon the "circuit-breaker" which suspends airlines that bring in infected passengers. International sports events are returning. Shanghai, eerily quiet during its lockdown in April and May, will hear the growl of racing cars when Formula One returns in April 2023.

In September China approved an inhalable vaccine that is now being used in 14 cities. At a private conference on November 4th, a former official at its Centre for Disease Control and Prevention said that "substantive changes" in the country's approach were likely in the next six months, according to Reuters, a news agency.

But if China is preparing to exit, preparations will be lengthy. It will first want to suppress small but widespread outbreaks in more than 100 cities, including Guangzhou, the capital of Guangdong, a province with a GDP as big as South Korea's. It will then want to keep a lid on infections through winter, so as not to overtax its hospitals. And it will presumably take no big decisions until new officials are installed at the National People's Congress in March.

Before it can reopen with any confi-

►dence, China will need to stockpile antiviral drugs. It will also have to build more intensive-care units and, crucially, lift the vaccination rate among its elderly.

The vaccination rate is a “leading indicator” of reopening, reckons Citigroup, another bank. The share of people aged 60 or above who have received a booster shot reached 66% earlier this year, before plateauing. Some wonder if China is waiting for more effective home-grown jabs before renewing its immunisation drive.

It is also possible that Chinese officials do not want to prod the elderly to get an-

other jab until they know reopening is on the way. The protection conferred by even the best shots wanes. So there are dangers in vaccinating people too soon as well as too little. As it happens, the percentage of boosted elderly increased to 68.5% in November. If it continues to climb, speculation about a reopening will intensify.

The economy could grow by 5.5-6% in the event of an orderly reopening, according to the Economist Intelligence Unit, our sister company. Grimmer scenarios are possible: a chaotic end to the “zero-covid” regime could cause the economy to shrink

for a quarter, before a subsequent recovery. For this reason, whenever it begins, the pace of reopening is likely to be cautious.

Although many will feel relief as controls are relaxed, others will be worried. It will take a concerted propaganda effort to dispel the stigma the disease now carries, meaning consumer confidence may rise only slowly. On November 6th, vaccinated competitors took part in the Beijing marathon, the first for two years, running over 26 miles from Tiananmen Square to the “Bird’s Nest” Olympic stadium. The route to reopening could be just as arduous. ■

Buttonwood The sock parallel

Tech stocks have tanked. Are they now good value?

AS ANY SAVVY shopper knows, there is a world of difference between a sale and a deal. Just because something is discounted from its initial price does not mean that it is worth buying—perhaps the sticker price was far too high originally, the discount is too small or the item is simply poor quality. Such considerations will be on the minds of people hitting the shops on November 25th for “Black Friday”, a mammoth sale which follows America’s Thanksgiving holiday.

They are always on the minds of investors. “Whether we’re talking about socks or stocks, I like buying quality merchandise when it is marked down,” Warren Buffett, a celebrated investor, once joked. Most share prices have fallen this year—the S&P 500 index of American stocks has shed more than a fifth of its value—but the prices of technology stocks have plunged most precipitously. The tech-heavy NASDAQ is down by almost a third, after poor third-quarter earnings precipitated yet another sell-off. Amazon, Netflix and Meta have this year shed a whopping 48%, 58% and 70% of their value. Such discounts mean tech stocks are certainly on sale. But are they a good deal?

The art of evaluating whether a company is a bargain at its current price is one practised by so-called value investors, who earn that title because they seek out stocks unloved by other investors despite solid fundamentals. For much of the past decade, tech stocks have been an unattractive proposition to these parsimonious types. That is in part down to how value investors assess companies and in part down to the characteristics of tech firms.

The original value investor was Benjamin Graham, an academic and author, in whose footsteps Mr Buffett treads. And

Graham relied most of all on two measures: the ratio of share price to earnings, which compares the market value of a firm with its profits; and price to book value, which compares a share price to the value of a company’s assets, such as property, equipment and inventories.

For much of the past decade tech stocks have looked mighty expensive on these measures. At the beginning of the year, the share prices of Alphabet, Amazon, Apple, Meta and Netflix were on average 38 times earnings and 12 times book value. The equivalent figures for the Russell 1000, a broad index of stocks, were 24 times earnings and four times book value. Neither group would have qualified as a deal for Graham: he liked firms priced at below 15 times earnings and 1.5 times book value. But tech’s multiples would have been particularly off-putting.

These sky-high valuations partly reflected tech companies’ characteristics. Firms from Alphabet to Zoom tend to have relatively few physical assets that are captured by book value and many intangible ones—such as software and

human capital—that are typically not included. They also tended to be fast growers, meaning that measuring their price against present earnings risked understating future profits. For this reason, tech stocks appealed more to “growth” investors, who tend to buy companies with rapidly rising profits, than they did to value types.

This means value investors missed out on years of growth, but also dodged the recent rout. Are tech prices now low enough for them to take a look? Some stocks, including Amazon and Netflix, remain expensive on favoured measures. Other smaller ones, including PayPal and Zoom, may attract interest. So might two giants. Alphabet, with a price-to-earnings ratio of 17, looks cheaper than most value stocks. Meta, which currently trades at just nine times earnings and two times book value, might have piqued even Graham’s interest. Tech investors have long been conscious of having paid a lot for their shares, but hoped these valuations would be justified in the long-run. The fact that many tech stocks now qualify as value stocks will come as a considerable blow.

Perhaps the idea that value investing and tech stocks are inherently incompatible was simplistic. Modern value investing is practised by all sorts, including a number of quantitative investors such as Cliff Asness at AQR Capital Management, who crunch vast data sets to compare firms against wide and varied measures of their worth. Rather than comparing the results with arbitrary criteria across all kinds of firms, they instead tend to compare them within industries. But one thing remains true regardless of the sophistication of the analysis. Tech stocks today are much better value than they were at the start of the year.



International commerce

Fresh factories

Who wins from the unravelling of Sino-American trade?

FROM DISEASE and downturn to the deterioration in Chinese-American relations, there has been no let-up to the blows battering the world's trading system. The latest threat stems from the possibility of another global recession. Only two years after the world sank into a covid-induced slump, shipping bosses are again warning of grim prospects for international trade.

Even beyond the ups and downs of the economic cycle, deeper shifts in global trade are taking place. Firms are reconsidering their production decisions, and governments are pushing the process along. Such shifts might have seemed outlandish in 2018 when Donald Trump, then America's president, first slapped tariffs on imported Chinese goods. Since then, a pandemic has struck, and President Joe Biden has banned the export of advanced semiconductor technology to China and plans to provide subsidies worth hundreds of billions of dollars for investment in domestic manufacturing. A rejigging of trade now feels inevitable rather than unimaginable—and the outline of its new geography is becoming clearer.

Global trade in goods staged an impressive bounceback after the covid-19 downturn in 2020. As a share of world GDP, its value last year rose to the highest level since 2014. But not all trade routes are flourishing. When Mr Trump took his protectionist turn, there was hope that economies in Africa and Latin America might attract some of the business that would have otherwise flowed to China. Instead, the biggest winners from changing trade patterns are to be found in Asia.

Global trade data emerge slowly. Figures on imports to big economies are therefore the best way to get an up-to-date picture of what is happening. According to American data released on November 3rd, the country's imports have risen by a third since 2018. Gains, though, have been unevenly distributed. American imports of Chinese goods stand just 6% above four years ago, a hefty decline in China's market share since President Trump launched his trade war. America's imports from the EU have also grown in lacklustre fashion, up by just 12% since 2018. "Friendsourcing" may be happening, but not on a grand scale. Imports from Canada and Mexico have risen by 39% and 34% respectively.

The great champions of the past four years are in Asia. Exports to America from



Bangladesh and Thailand have jumped by more than 80% since 2018; exports from Vietnam are up by more than 170% (see chart). India and Indonesia have seen their exports grow by more than 60%. As a result, China's share of American imports dropped by four percentage points between 2018 and 2022, from 21% to 17%. China used to account for nearly half of Asia's exports to America; now it accounts for just over a third.

Nor is this simply an American trend. China is also importing more from Asia. Over the first nine months of this year, the share of China's imports coming from America fell by two percentage points compared with the same period in 2018.



Vietnam's va-va-voom

The share coming from the EU declined by a similar amount. On the other hand, the Association of South-East Asian Nations (ASEAN), a regional club of ten countries, saw its share of China's imports grow by two percentage points. European trade figures are less up-to-date, but Asia's rise is also visible in them. Although the share of EU imports arriving from China increased last year, so did those from South and South-East Asia. Neither China nor Europe saw a comparable rise in imports from other regions of the world.

Cultivating new sources of goods or components takes time and investment, so the shift in trade patterns now visible in the data mostly reflects choices firms made well before this year's geopolitical ructions. Some redistribution of trade would have happened even in placid economic conditions. Rising labour costs in China, for instance, would have made it attractive to move low-value sorts of manufacturing—in textiles and apparel, say—to places like Bangladesh.

However Mr Trump's tariffs seem to have played an important role. According to recent analysis of industry data by Chad Bown of the Peterson Institute for International Economics, a think-tank, China's share of America's imports rose from 36% to 39% this year in goods not covered by tariffs. For goods subject to a 7.5% tariff, however, China's share sank from 24% to 18%. And for those hit by a whopping 25% tariff, which covers lots of IT equipment, China's share of imports fell from 16% to 10%. Overall America is now much less dependent on Chinese goods, from furniture to semiconductors.

This change is more nuanced than it appears at first glance. It seems likely that many of the components used to make goods in India or Vietnam are themselves produced in China. Although the detailed supply-chain data needed to say for sure will not be published for several years, Chinese export figures are certainly suggestive. The two-percentage-point drop in the share of China's total exports destined for America over the period from 2018 to 2022 is exactly matched by the increase in China's exports to ASEAN economies.

The story so far seems to be one in which Asia's emerging economies increasingly intermediate trade between China and the rich world. Dreams that supply chains draped across Latin America and Africa would remake the world's economic geography are still nothing more than dreams. But this direction of travel is an unalloyed boon for a rapidly growing arc of countries stretching from India to the Philippines. In time, as the consequences of recent geopolitical developments accumulate, an ever larger share of the value in Asian supply chains may concentrate outside of China rather than within it. ■

Free exchange | Tipping the scale

Interest rates have risen sharply. But is monetary policy truly tight?



FOR A FEW months this year there was a rare moment of economic consensus. The rich world's central banks, especially America's Federal Reserve, had uncaged inflation. They had to correct the error by raising interest rates sharply and swiftly.

But as 2022 draws to a close the uneasy peace between doves and hawks has broken down. Their latest disagreement about monetary policy is so big it is as if they are working with different sets of facts. While some economists warn that interest rates have now risen by more than is necessary to contain price growth, others say that monetary policy has not really tightened at all.

Like fixing a dislocated shoulder, sorting an inflation problem is supposed to be painful yet simple. Every economist knows the maxim, dubbed the "Taylor principle" after John Taylor of Stanford University, which tells central bankers to raise interest rates by more than inflation has gone up. To disregard the rule is to allow inflation-adjusted borrowing costs to fall, administering a stimulus that makes the problem worse. To follow the principle, policymakers must raise real rates every time prices accelerate. If they do, sooner or later the economy will slow and order will be restored. The Taylor principle is necessary to stabilise inflation in state-of-the-art economic models. It is also common sense.

Yet today no major central bank is following the principle. Since the start of last year inflation has risen by five percentage points in America, eight points in Britain and ten points in the euro zone. Central banks' interest-rate rises are rapid by historical standards. But they are nowhere close to keeping pace with this price growth. And that has led some economists to ring the alarm bell. "The Fed has not yet hit the brakes," declared Jonathan Parker of the Massachusetts Institute of Technology after the latest bumper 0.75-percentage-point increase on November 2nd.

The trouble is that although the Taylor principle makes sense in theory, there is disagreement about how to apply it in practice. A true measure of real interest rates is forward-looking. New borrowers and lenders need to know what inflation will be in the future, not what it was in the past. According to a survey by the New York Fed, consumers expect inflation of 5.4% over the next year. Mr Parker subtracts this from the Fed's target interest-rate range of 3.75-4% to get a negative real interest rate of about -1.5%. That is

below the prevailing rate before the covid-19 pandemic and "very, very not contractionary", he says.

But why only look forward one year? Many loans are provided over a longer time frame. And here lies the doveish calculation. Greg Mankiw of Harvard University worries that the Fed may be overdoing things because the five-year real interest rate priced into financial markets has risen sharply since the start of last year, by 3.4 percentage points at the time of writing. The textbook version of the Taylor rule, a more expansive cousin of the Taylor principle, says that real interest rates should go up by half the increase in inflation. Look five years ahead in financial markets, and take a measure of underlying inflation—Mr Mankiw points to a three-point rise in annual wage growth—and real rates have roughly kept pace with inflation. In other words, the Fed's tightening looks like too much, rather than too little.

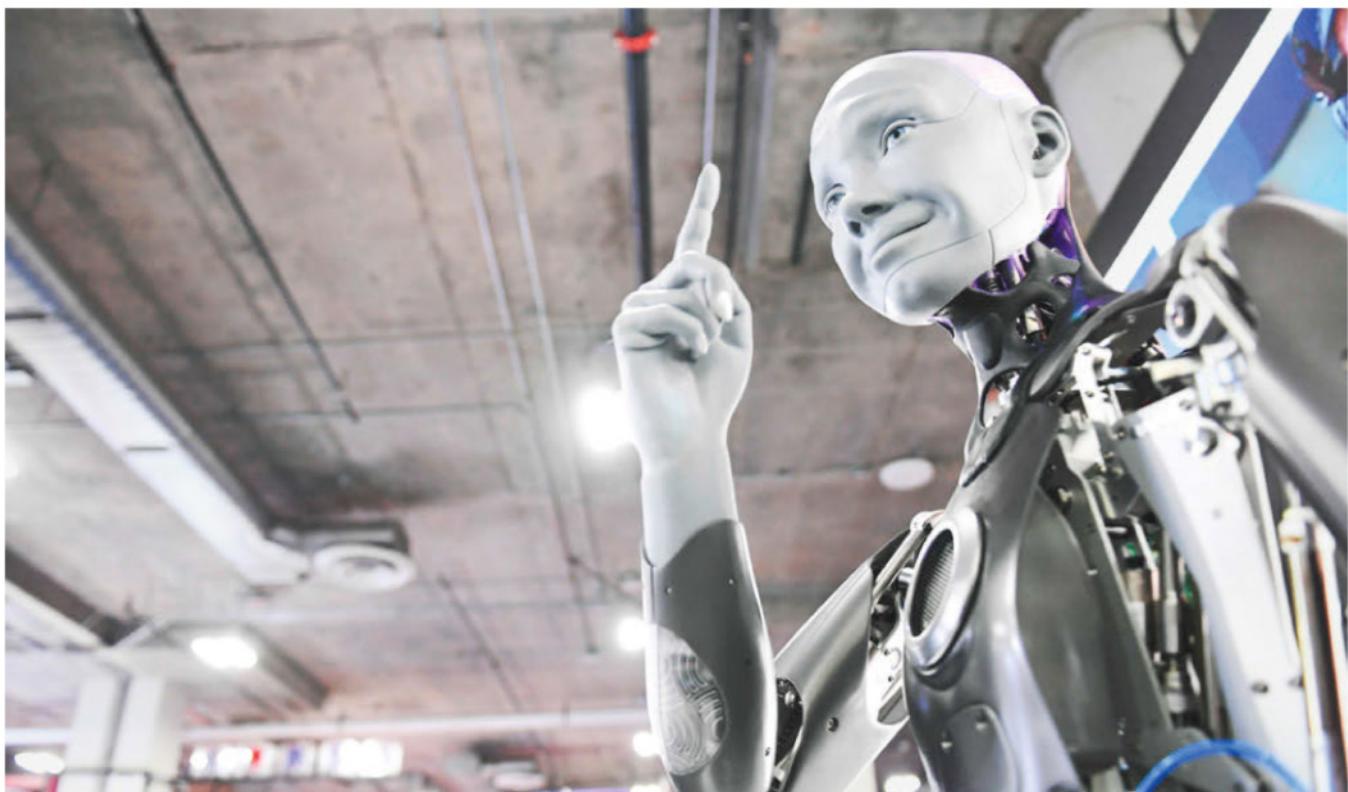
The argument relies on what economists call "rational expectations". The public's view about what a central bank might do tomorrow is in theory just as important as today's short-term interest rates. As a result, in modern economic models it does not matter much if policymakers fail to raise interest rates above inflation at a given point in time, notes Michael Woodford of Columbia University. Only the expectation of a systematic disregard for the Taylor principle "indefinitely into the future" would cause monetary mayhem. And the Fed's policymakers are hardly showing this sort of disregard. The central bank is not done raising interest rates: markets expect them to rise above 5% next year. That could be enough to satisfy the Taylor principle by then.

A belief that expectations are rational is usually associated with a conservative, hawkish view of the world, in which people belong to the species *Homo economicus*. Today these arguments help doves who argue that central banks should calm down. The Fed boasts that it has turned the real interest rates that are priced into financial markets positive at almost all horizons. The worst case of a yield curve having slipped away from a central bank's control is in Britain—but, ironically, the problem is that markets seem to expect more interest-rate increases than the Bank of England would like. At its latest meeting the central bank forecast that the path for rates envisaged by markets would result in a deep recession and bring inflation well below target. It is almost as if the Bank of England has too much inflation-fighting credibility.

Even if the Taylor principle is being met on a forward-looking basis, that is not the end of the story. The principle prescribes only the minimum tightening that is needed to bring inflation to heel. Were central banks only narrowly to clear the hurdle then inflation could take a long time to return to target. Another issue is that interest rates are supposed to rise still higher when an economy is overheating. America, where there are almost two job openings for every unemployed worker, clearly has this problem. Failing to respond to it could prolong the inflationary episode.

From first principles

Perhaps the best argument for more rate rises, though, is the poor record of both economic models and financial markets at predicting inflation. Over the past year both have persistently underestimated its rise. In an uncertain environment, it makes sense to put more weight on data and less on forecasts—a point central bankers have begun to emphasise. Following the Taylor principle with respect to realised inflation might make policymakers slow to react to a change in the economic winds. But that is a price worth paying to be sure of bringing inflation under control. ■



Robotics

A cryin', talkin', sleepin', walkin', livin' doll

FALMOUTH

Robots that resemble human beings are getting rapidly better

ASKED A QUESTION, Ameca fixes you with sapphire-blue eyes. Does that face contain a hint of a smile? "Yes, I am a robot," is the reply. Another Ameca, standing nearby in a group of four, stares across inquisitively and tries to join in. "Currently, it's the worst-ever party guest," says Will Jackson, Ameca's creator. "It butts in on every conversation and never shuts up."

Mr Jackson, boss of Engineered Arts, a small robotics company in Falmouth, south-west England, is trying to fix that problem. Those eyes contain cameras and the Amecas are being trained to recognise faces and decide who is paying attention or making eye contact during conversations. Teaching manners to robots in this way is another step in the long, complicated process of making humanlike machines that can live and work alongside people—and, importantly, do so safely. As Ameca and other robots show, great strides are being made towards this end.

Some big boys are also moving into the business. On September 30th Elon Musk, boss of Tesla, SpaceX and Twitter, unveiled

Optimus, a clunky, faceless prototype that walked hesitantly on stage and waved to the crowd. It was built from readily available parts. A more refined version, using components designed by Tesla, was then wheeled on. Although it was not yet able to walk, Mr Musk said progress was being made and that in volume production its price could fall to around \$20,000.

Every home should have one

That is a tenth of the cost of a basic Ameca. Mr Jackson, who attended Optimus's unveiling, agrees prices will come down with mass production. (He has sold 11 Amecas so far, and plans to open a factory in America to boost output.) But he wonders what, exactly, Mr Musk is proposing. The unveiling

featured a video of Optimus moving parts in a Tesla factory. Yet car factories are already filled with the world's most successful robots—transporting components around, welding and painting parts, and assembling vehicles. These robots do not look like people because they don't need to.

The reason for building humanoid machines, Mr Jackson maintains, is for tasks involving human interaction. With a bit of development Ameca might, for example, make a companion for an elderly person—keeping an eye on them, telling them their favourite television programme is about to start and never getting bored with having to make repeated reminders to the forgetful. To that end, Engineered Arts aims to teach its robots to play board games, like chess. But only well enough so that they remain fallible, and can be beaten.

To interact successfully with people, Mr Jackson asserts, a robot needs a face. "The human face is the highest bandwidth communications tool we have," he observes. "You can say more with an expression than you can with your voice." Hence Ameca's face, formed from an electronically animated latex skin, is very expressive.

Although the company, which has its origins in making animated figures for the entertainment industry, can construct highly realistic faces, Ameca's phizog is designed deliberately to look how people might expect a robot from the world of science fiction to appear. It has a grey complexion, visible joints and no hair. It there-

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fore avoids falling into the “uncanny valley”, an illusion that happens when an artificially created being shifts from looking clearly not human into something more real, but not quite real enough. At this point people feel disturbed by its appearance. Comfort levels rise again as similarity to a human becomes almost perfect.

Some roboticists do, however, seek such perfection. Besides assisting people, robots can also act as their avatar representatives. Ishiguro Hiroshi, director of the Intelligent Robotics Laboratory at Osaka University, in Japan, has built one in his own image. He recently unveiled another, which resembles Kono Taro, Japan’s digital minister. The idea is that people either speak through their avatar with their own voice, or through someone else’s voice modified to sound like them. Mr Kono’s avatar will, apparently, be used to stand in for the minister at public-relations functions.

Though less humanlike, Ameca could work as an avatar, too. Its conversation is more compelling—a loquaciousness derived from an external AI program called a large language model, with which it interacts via Wi-Fi and the internet.

Engineered Arts is also working on hardware and software to allow the latest developments in computer vision to be incorporated quickly into its robots. And, as Mr Jackson readily admits, Ameca needs work in other areas, too. Asked if it can walk, the robot replies: “Unfortunately not, but I hope to soon. Until then I am bolted to the floor.” A set of experimental legs stands ready in a nearby corner.

Different strokes

Different companies are coming from different directions in their approaches to making humanoid robots. Mr Jackson, who was born into a family of artists involved in making automatons, gravitated naturally towards producing modern versions of them for the likes of theme parks, museums and the film industry. These have steadily evolved in sophistication. Some work as interactive guides. Others are used as research platforms by universities. During the covid lockdown, when business dried up, the firm threw all of its resources at developing Ameca, its most advanced model yet.

Other developers, like Tesla, are able to organise far bigger efforts—but not always successfully, as the case of Honda, a Japanese carmaker, shows. At one point, Honda’s diminutive humanoid robot ASIMO (so named to honour Isaac Asimov, who wrote science-fiction stories about robots) was considered the world’s most advanced. The firm started work on this project in the 1980s, and although ASIMO could walk—albeit clumsily—interpret voice commands and move objects, Honda shut the project down in 2018 to concentrate instead on

more practical forms of robotics, such as mobility devices for the elderly.

Some roboticists have turned a hobby into a business. Shadow Robot, in London, which makes one of the most dexterous humanlike robot hands available, traces its roots to hobbyists meeting in the attic of its founder’s home. Most outfits, however, have emerged from universities. One of the best known is Boston Dynamics, which began at the Massachusetts Institute of Technology. Atlas, its Hulk-like humanoid, has become an internet video sensation—running, jumping and performing backflips. But Atlas is principally a research project, too expensive to put into production. The company does sell a walking robot, but it is a four-legged one called Spot, which resembles a dog.

One of a bipedal robot’s advantages is that it should be able to go wherever a person can. That includes navigating uneven surfaces and walking up and down steps. Digit, made by Agility Robotics of Corvallis, Oregon, is actually able to do this.

Digit is based on Cassie, a walking torso developed at Oregon State University using machine-learning studies of human locomotion. In May, it set a record as the fastest robot to run 100 metres. (It took 24.7 seconds, some way behind Usain Bolt’s 9.6.)

Unlike Cassie, Digit has a chest, arms and hands of a sort—though no fingers. In place of a head it has a lidar, an optical analogue of radar that builds up a three-dimensional model of the world around it using lasers. Digit is not designed to be humanoid, says Jonathan Hurst, Agility’s chief technology officer. It is, rather, a “human-centric” robot intended as a tool for people to use to achieve more things.

One of Digit’s first roles is likely to be in a distribution centre run by an online retailer or freight company. Some already use automated goods-handling, but usually in

areas fenced off to keep people out, in order to avoid injuries. Elsewhere, tasks remain labour-intensive. By being designed to work safely alongside people, Digit could start changing this—for instance, by moving and stacking crates (see picture). It might then progress to unloading trucks and subsequently graduate to making home deliveries, carrying items from van to doorstep. Ultimately, the aim is to be able to instruct the robot by talking to it.

Agility plans to produce Digit in volume by 2024. It is working with several big, though unnamed, delivery outfits, on ways in which Digit could collaborate safely with people. If the robot’s sensors detect someone it pauses and then navigates around them. Nevertheless, says Dr Hurst, it will soon acquire a simplified face to help signal its intentions. An animated set of eyes, for instance, will look in a particular direction to indicate which way it is heading, and a glance at someone will show it has noticed them.

Do no harm

Such safety systems will be needed for robots to interact successfully with people. At present, their use is governed mainly by standard safety and product-liability rules. Some argue, however, that special robot-specific laws will be required to ensure they are operated safely. As every sci-fi buff knows, Asimov laid out a set of these eight decades ago. They are:

- A robot may not injure a human being or, through inaction, allow a human being to come to harm.
- A robot must obey the orders given to it by human beings, except where such orders would conflict with the First Law.
- A robot must protect its own existence as long as such protection does not conflict with the First or Second Laws.

But, as every sci-fi buff also knows, Asimov’s storylines often revolve around these laws not quite working as planned.

About his Digits, Dr Hurst says, “My opinion is that they are very safe. But we need real statistics and a regulatory environment to prove this.”

For his part, Mr Musk said that Optimus would contain a device that could be used as an off switch if necessary. Although the robot itself would be connected to Wi-Fi, the switch would not, so that it was isolated to prevent remote interference.

As far as the Amecas’ safety is concerned, Mr Jackson is taking an engineering approach. He observes that one reason human limbs avoid injuring others is by being both firm and floppy at the same time. Unfortunately, the small, powerful actuators needed to emulate this in robots do not yet exist. He is working on that, though, for it will be of little use teaching an Ameca social graces if it then commits the faux pas of bashing into you. ■



A robot’s work is never done!

Palaeontology

The earliest mass extinction

Even before the Cambrian, biology's "reset" button was being pushed

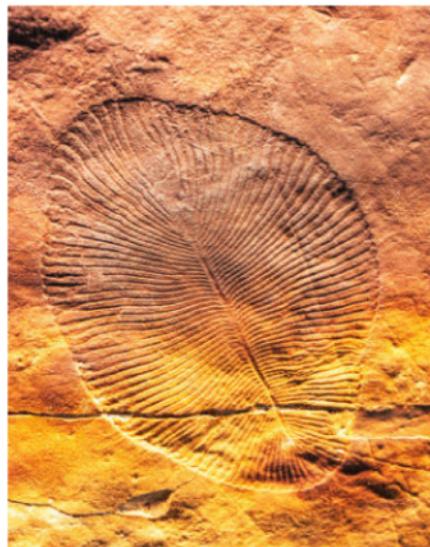
MASS EXTINCTION is, as it were, a way of life. Earth's history has seen several. The most famous, 66m years ago at the end of the Cretaceous period, did for most of the dinosaurs (only a few of the feathered variety, now referred to as "birds", slipped through). The worst was 252m years ago between the Permian and Triassic periods, when 80% of marine species, as well as a lot of terrestrial ones, snuffed it.

But the oldest? Research just published in the *Proceedings of the National Academy of Sciences* by Scott Evans, of Virginia Tech, and Mary Droser, of the University of California, Riverside, suggests it happened 550m years ago—a particularly intriguing conclusion because that was during a geological period, the Ediacaran, which predates the explosive diversification of animal life that got under way 539m years ago at the beginning of the Cambrian period.

The Ediacaran itself started 635m years ago. Though a goodly number of animals have now been identified as dating from it, many bore scant resemblance to those which followed and, in particular, precious few had easily preserved hard parts in the form of shells, teeth or bones. This lack caused them to be overlooked by early palaeontologists—and even now means they are known only from sites which had ideal preservation conditions at the time.

The latter part of the Ediacaran, the portion of that period from which most of its fossils derive, is itself divided into three: the Avalon (575m–560m years ago), the White Sea (560m–550m years) and the Nama (550m–539m). Each of these, collections suggest, has a distinctive mix of fossils. Collections also suggest that the Nama fauna is considerably less complex than the White Sea's. Why this is so has been a matter of debate. Some argue that it reflects a real diminution of diversity. Others suspect a bias introduced by chance differences in the original latitudes and environments of the sites which have been collected from, and the mechanisms by which the fossils there were preserved. Dr Evans and Dr Droser therefore decided to try, once and for all, to tease out the details.

They first compiled a database that included every known Ediacaran animal species, together with information such as the size of its body, the way it fed and its likely habits—and also each place from which it has been recorded, the nature of the sediment in which it was buried there, that bu-



An inhabitant of Flatland

rial site's latitude at its time of formation, and so on. They ultimately accumulated 307 entries for particular combinations of taxon and site.

With the ability thus acquired to compare sites of different ages but from the same palaeolatitude, the same ancient environment and with the same preservation mechanisms at work, the two researchers and their collaborators were able to demonstrate that the three faunal mixtures are indeed different—with the change between the White Sea and the Nama being much bigger than that between the Avalon and the White Sea.

To avoid arguments that depended on whether particular specimens were of the same species, or merely of related species, they concentrated their analysis on differences at the taxonomic level of the genus (one step up from the species in Linnaeus's classification system). Of the 70 animal genera identified at White Sea sites, only 14 made it through to the Nama. In other words, roughly 80% of genera died out in the transition between the two—a mass extinction of Permo-Triassic proportions.

Precisely why this happened is not clear. The database shows that no particular habits or modes of feeding were spared. Post-Cambrian mass extinctions have been attributed, variously, to asteroid impacts, colossal volcanic eruptions, big changes in sea level or even, in one case, a nearby stellar explosion. Dr Evans and Dr Droser speculate that the Ediacaran event may have been caused by a reduction in oceanic oxygen levels, for the 14 genera which survived it had bodies with large surface areas (see picture), which would have helped them absorb oxygen if it was scarce. There is, indeed, some evidence in the rocks for such a fluctuation. Why oxygen levels might have plummeted like that, though, remains a mystery. ■

Medicine

Blood not so simple

Red cells made in a laboratory have been infused into people

UNTIL THE 1940S, blood transfusions often went wrong because some of the main blood-group systems, such as the Rhesus factor, had yet to be discovered. This hit or miss approach to matching donors with recipients is now a thing of the past, as tests for all sorts of characteristics of an individual's blood have become available. But finding a well-matched donor can still be difficult. Some patients have blood types so rare that there may be but a handful of appropriate donors in the country where they live.

On November 7th a consortium of researchers at several British institutions, co-ordinated by NHS Blood and Transplant, a government health authority, and Bristol University, announced a step towards solving this problem. They have successfully transfused into two healthy volunteers red blood cells grown from appropriate stem cells donated by others.

Until now, such manufactured red cells had been given only to those whose own stem cells had been the source. The stem cells used for this experiment, however, were extracted from blood donated in the normal way. The researchers mixed into this donated blood magnetic beads armed with proteins that stick specifically to the stem cells in question, binding them to the bead. The beads, replete with their cellular cargo, are then easily collected.

That done, the harvested stem cells were grown and multiplied in a nutrient solution for between 18 and 21 days, which served to turn them into young versions of red blood cells known as reticulocytes. Once transfused, reticulocytes quickly develop into the real McCoy. This approach would increase the value of batches of rare blood—which could, once plundered of stem cells, also be used in the normal way. Moreover, being newly minted, lab-made red blood cells would be expected to last longer in a recipient's body than those from a normal transfusion, since transfused blood inevitably contains a fair proportion of cells that are on their last legs.

The next step is to measure just how long the manufactured cells actually do last. To that end, they have been tagged ►

Correction In "A new Great Game" (November 5th) we mistakenly wrote that DARPA's AI-assisted Climate Tipping-point Modelling programme is intended to influence policy. It is, of course, intended to inform policymakers, a rather different thing. Sorry.

► with a special radioactive dye commonly used in medicine to track things around the body. If they do indeed outlive conventionally transfused cells, as the researchers hope and preclinical studies suggest they will, then recipients will not need such frequent transfusions.

That will help a lot. At the moment, patients with blood disorders such as sickle-cell disease and thalassaemia may require a transfusion as often as every four to six weeks. As a consequence, some develop iron overload, which causes severe complications. Others end up forming antibodies against many blood types, which makes finding a matching donor harder.

If all goes well, the trial will be extended to include at least ten healthy volunteers. But that is only the beginning. Larger tests, including tests on actual patients, will be needed before this approach can be put into practice. That will take time, for it nor-

mally requires between five and 15 years to introduce a new medical treatment.

Even then, the technique will probably be reserved for a favoured few—those possessing extremely rare blood types being at the head of the queue. Unless some unforeseen breakthrough occurs, making the cells in quantity will be challenging.

At the moment, harvested stem cells eventually exhaust themselves, so the number of red cells a donation can yield is limited. And manufacturing is a cottage industry. Producing a batch of reticulocytes requires 24 litres of nutrient solution to generate a tablespoon or two of product. The cost of scaling this up is unknown, but will probably be far more than the £145 (\$166) that a normal blood donation currently costs in Britain. It may eventually be possible to make the stuff in bulk. But for now, human blood donors will continue to be extremely welcome. ■

the combatants were, the more frequently this happened. Dr Norscia speculates that relations between close relatives are more secure to start with, so rapid and explicit reconciliation is less necessary for them than for those who are not close kin.

On other occasions, though, a third pig stepped in. Sometimes this bystander acted as a peacemaker, engaging with the aggressor and reducing the number of subsequent attacks compared with what might otherwise have been expected. Sometimes, by contrast, the bystander engaged with the victim. This appeared to calm the victim down, for it reduced anxiety-related behaviour such as shaking and scratching.

Welcome to the club

Offering such consolation to the down-trodden adds pigs to a small and exclusive club. Some primates, including human beings, do it. So do certain canids and crows. And elephants, cetaceans, parrots and some rodents are suspected of it, though so far the evidence concerning them is anecdotal. This list is familiar to zoologists as comprising groups of species known to have developed, independently of one another, high levels of intelligence, both individual and social.

Social intelligence need not, though, be entirely altruistic. Pigs were more likely to intervene after a conflict if they were closely related to either the aggressor or the victim. This is probably an example of kin selection, which favours the evolution of behaviour that assists the collateral passage of an individual's genes alongside the more normal route of direct descent.

People engage in kin-selected behaviour all the time, of course. It is known as nepotism. Which also helps to explain the number of people with the surname "Churchill" who have sat in Britain's Parliament. It takes one to know one. ■

Ethology

More equal than others

How pigs reconcile after fighting confirms their intelligence

ILKE PIGS," Winston Churchill supposedly once said. "Dogs look up at us, cats look down on us, but pigs treat us as equals." Whether Churchill's contemporary George Orwell also liked pigs is less clear. But he, too, surely saw something in them that was lacking in other domestic beasts, for it was they who ended up running the show in his allegorical novel, "Animal Farm". Pigs, then, are intelligent social creatures.

And, like all animals, they sometimes fight. A study just published in *Animal Cognition* by Ivan Norscia, a biological anthropologist at the University of Turin, in Italy, and his colleagues, looked at how a group of 104 domestic pigs went about resolving such incidents. In total, Dr Norscia and his team studied the details of 216 porcine conflicts over the course of six months.

Some pigs tend to be aggressors; others tend to be victims. Who is what depends largely on weight, for, among pigs (as, indeed, among many animals), pounds mean power. The aggressor might bite, kick, bump or lift the victim (or string together a sequence of those actions). Most conflicts ended in seconds, but some lasted a minute or two.

In most animal species that would be that. However, many of the porcine conflicts Dr Norscia observed had interested parties beyond the protagonists. He therefore wanted to understand the role of these

bystanders in resolving fights—and what this says about pigs' cognitive abilities.

Since there was usually not enough time for a bystander pig to intervene during the heat of a conflict (though this did occur), he and his colleagues looked at what happened in the three minutes directly following an aggressive interaction. Sometimes, they found, the protagonists made up on their own—for instance, by touching noses. The more distantly related



Never wrestle with a pig



American politics

The lion of liberalism

New biographies of Ted Kennedy rank him as one of America's greatest senators

Ted Kennedy. By John Farrell. Penguin Press; 752 pages; \$40

Against the Wind. By Neal Gabler. Crown; 1,264 pages; \$45

WHEN HE FIRST ran for the Senate in 1962, Edward Moore Kennedy had just turned 30, the minimum age for entry into the upper chamber. His brother, John, 15 years his elder, was president; another brother, Robert, was attorney-general. The Kennedys were keen to keep the Massachusetts Senate seat in the family. Had his name been truncated to Edward Moore, his opponent chided, his candidacy would be a joke. Kennedy often recalled a notable campaign stop at a bakery in South Boston. "Hey Kennedy", a baker called out to him, "they say you haven't worked a day in your life." Kennedy readied himself for the coming broadside. "Lemme tell you", said the man, "you haven't missed a thing."

Ted Kennedy won the seat and remained a senator until his death in 2009.

And he did work, perhaps harder than any of his peers. For two decades speculation swirled about whether he would run for the White House. But he spurned Hubert Humphrey's plea to join him on the ticket in 1968 (so soon after Bobby's murder), turned George McGovern down in 1972 and eventually decided against a run in 1976, probably his best opportunity. Maybe he lacked the fire in the belly, or feared becoming the third Kennedy to be assassinated. Then there were the questions about his character: the womanising, the drinking and, above all, the stain of Chap-

paquiddick, where in 1969 a 28-year-old staffer, Mary Jo Kopechne, drowned after Kennedy drove his car off a bridge—and failed to report the accident for nine hours.

When he did run, challenging Jimmy Carter for the Democratic nomination in 1980, he struggled to articulate why he wanted to be president. He suffered defeat and the Carter-Kennedy confrontation, John Farrell laments, "split their party, crippled the progressive cause for a generation, cost the Democrats their hold on Congress, and put Ronald Reagan in the Oval Office". So it was in the Senate where Ted would make his mark.

It was a mighty one; two hefty new biographies rate him a giant. "One of the greatest US senators, ever," reckons Mr Farrell, who covered Kennedy for the *Boston Globe*, "preserving and advancing progressive ideals through decades of political peril". Arguably "the most consequential public servant of the last 50 years and the one who did more to help his fellow men and women than any other," concludes Neal Gabler of the State University of New York at Stony Brook. Mr Farrell's is the pacier work, Mr Gabler's the more detailed and analytical. Both hail a champion of liberalism (which in today's fuzzy parlance might be called "progressivism") at a time when liberalism is under assault.

The youngest of Joseph and Rose Kennedy's nine children, Ted seemed the least talented of the brothers, stumbling over

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words and plagued by feelings of inadequacy. The family thought he would never amount to much. At Harvard, fearing he would fail a Spanish exam, he cheated and was expelled. His marriage to Joan Bennett, who struggled with alcoholism, was lonely and ended in divorce.

Still, he could rely on the Kennedy brand and connections, plus a million-dollar trust fund from the age of 21. In the Senate he found his niche. He joined what Mr Farrell describes as "a sump of aged men with liver spots, claws and bourbon breath, who strode the chamber with reptilian gait and hailed one another with mellifluous courtesies". Kennedy had the patience for the slow grind of legislation and he knew how to cope with a seniority system. He came to master the place and its special chemistry. He was gregarious and politically shrewd. He did not take disagreements personally, so could reach across the aisle to work with Republican opponents. He was also resilient, surviving family tragedies, a debilitating plane crash and personal scandal.

Kennedy championed enlightened reforms. He helped expand voting rights and widened aid for the poor as well as access to health care for children. Indeed, he had a hand in just about every new social law: during his time in the Senate he sponsored 2,552 pieces of legislation and co-sponsored nearly 7,000 others. But as America entered a more conservative era, from 1976 he spent 30 years playing for the defence, fighting for the soul of America.

That is where Mr Gabler picks up the story in "Against the Wind" (Kennedy's earlier years are the subject of "Catching the Wind", published in 2020). The apt nautical title comes from a speech Kennedy gave in Memphis in 1978. "Sometimes a party must sail against the wind," he said. "We cannot afford to drift or lie at anchor."

The scale of Mr Gabler's biography invites comparison to Robert Caro's volumes on Lyndon Johnson, another giant of the Senate. But whereas Johnson relied on arm-twisting to exercise power, Kennedy's style and aims were different. His influence came through small gestures and endless effort. He was "the kindest and most thoughtful senator"—something no one would have said of Johnson—driven by a sense of "political morality" to act in the interests of the less fortunate.

There would be fewer landmark legislative wins during those decades of defence, though there were some notable ones: he collaborated with George W. Bush to set higher standards for public education, for example, and steered successive rises in the minimum wage. The Lion of the Senate, as he came to be called, wielded outside influence, not least on foreign policy, from the Soviet Union (pressing for arms control), to South Africa (for an end to

apartheid) to Ireland (for peace). Yet the crowning victory on health care, Barack Obama's Affordable Care Act in 2010, would come only after Kennedy's death.

More than once Kennedy's wayward personal life threatened to sink him. A new marriage in 1992 proved stabilising. The tireless work continued, as did the conspicuous compassion. He phoned the families of all 187 Massachusetts victims of the attacks of September 11th 2001—long calls during which he shared his own losses.

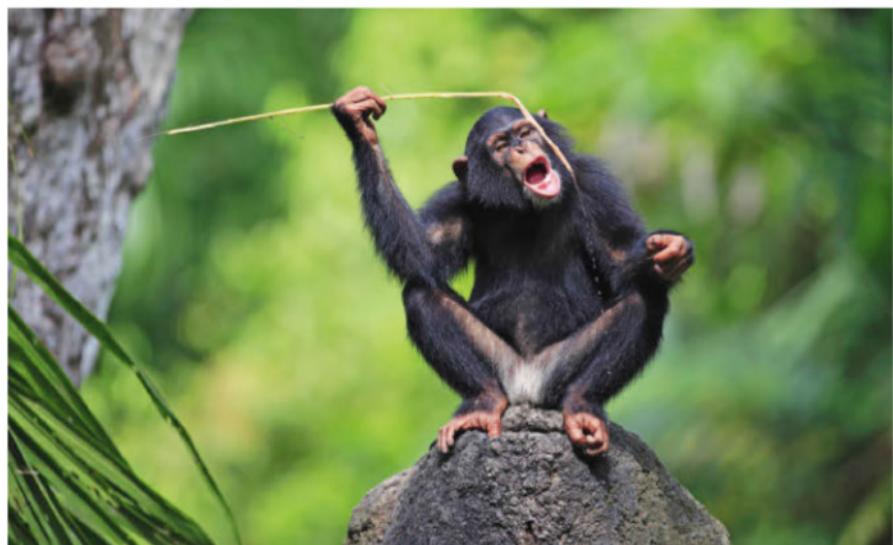
Being a Kennedy helped Ted get started. But eventually, Mr Gabler argues, he came into his own, escaping the self-possessed Kennedy stereotype of his father and brothers, with all the expectations that came with it, and the shadow of his siblings. "He had always been a Fitzgerald, like his grandfather, more a hardy, affable mess of a man": a flawed but good person, in this sympathetic telling, who sought to make this a better world. ■

Animal creativity

Primal instincts

The Creative Lives of Animals. By Carol Gigliotti. NYU Press; 304 pages; \$30 and £25.99

IN 1960 JANE GOODALL, a British primatologist, observed chimpanzees in Gombe National Park in Tanzania. At that point, it was thought only humans had the capacity to create and use tools, but the chimpanzees were using slim blades of grass to fish termites from their mounds (see picture).



Teach an ape to fish...

Louis Leakey, a palaeontologist and Ms Goodall's mentor, mused: "Now we must redefine tool, redefine man, or accept chimpanzees as human."

Since then the distinction between animals and humans has become increasingly nuanced. In addition to toolmaking, chimpanzees—and many other animals besides—display emotion and self-awareness. Studies show that elephants grieve, rats have empathy and pigs form strong friendships. In "The Creative Life of Animals" Carol Gigliotti, a professor emerita at Emily Carr University of Art and Design in Vancouver, has compiled research that examines such behaviour through the lens of creativity.

This requires a more inclusive, and generous, definition of creativity, for it is not a trait obviously exhibited by a prairie dog or caddis fly. Creativity, Ms Gigliotti contends, is not the exclusive domain of Jane Austen or Leonardo da Vinci. Nor is she referring to Pigcasso, the artistic pig rescued from an industrial pork facility outside Cape Town whose paintings have sold for thousands of dollars. Instead, Ms Gigliotti suggests discarding humankind's "master of the universe" perspective to consider creativity from the animal's point of view. "If animals in their own cultures can solve problems or create products of value to them, it seems accurate to consider these as creative," she writes.

Beaver lodges and dams are a case in point: there is no single template for their construction. Each river or lake has its unique features and beavers create a custom-made structure to adapt to the given habitat—so, in the author's intriguing framework, dams deserve to be considered a creative enterprise. In the less practical, more aesthetic realm, consider Julie's earring. Julie, a chimpanzee studied in the Chimfunshi Wildlife Orphanage Trust in

Back Story Losing the World Cup



The tournament in Qatar is tarnished. Should fans enjoy it anyway?

IT IS, ONCE again, July 4th 1990. You are watching the semi-final of the World Cup on a friend's sofa. At half-time, the score is still nil-nil; Paul Gascoigne, known as Gazza, a peerless but troubled English footballer, is in his magical pomp. The deathly penalty shoot-out that West Germany is fated to win is a distant prospect. Everything is still possible: for Gazza, for England, and for you.

The World Cup is a time machine. Each tournament evokes memories of previous ones, old pals and past selves, including, for this columnist, that bitter-sweet teenage evening 32 years ago. And even as it carries fans backwards, it draws them together from around the world. Collectively they follow the eclectic match-ups—such as, in the contest beginning in Qatar on November 20th, Ghana v Uruguay—or the piquant clashes between geopolitical foes, as in America v Iran. From distant bars, town squares and time-zones, millions of strangers gawk in unison at a wondrous overhead kick, or the wing-footed tyro who dribbles his name into history.

With its personal liturgies and worldwide communion, the World Cup can seem a kind of secular religion, or a benign global conspiracy for quadrennial fun. As Kafka might have put it had he been a football fan, there is plenty of hope, infinite hope, even, every four years, for England. It is a precious and unique event. This year, alas, it is also a scandal and a disgrace.

The authorities in Qatar, a tiny gas-rich Gulf kingdom, have always strongly denied that their bid to host the cup involved corruption of any kind. Yet cash seems to have sloshed around. An indictment in America alleged three decision-makers at FIFA, football's governing body, took backhanders, but didn't say

from whom. Inquiries have unearthed possible conflicts of interest stretching from politics to private transactions, like the £2m (\$3.2m) allegedly wired to a FIFA bigwig's child. A prominent Qatari spread largesse, apparently on his own account. Somehow, FIFA officials overlooked Qatar's blistering summer heat, which meant kick-off was shunted to November.

The footballers have thus been spared the venue's most punishing temperatures. The legions of foreign construction workers who built the glitzy new stadiums and other infrastructure were not. Some have died (the toll is disputed). Many more were paid paltry wages and forced to stump up exploitative recruitment fees.

True, in the glare of attention before the tournament, labour conditions in Qatar have improved, albeit not for everyone. Better, however, if respect for basic rights were a prerequisite for staging it, not a halting consequence. To dispel the fantasy that hosts become better global citizens, you need only recall another World Cup memory—of the one held in Russia in 2018. The images of Vladimir



Putin palling around at the final with Emmanuel Macron were nauseating even then; now they are repulsive.

Meanwhile Qatar's criminalisation of homosexuality may put gay supporters off going there. Some players plan to wear rainbow armbands in a stand against discrimination. Murky dealing, exploitation, prejudice: what ought to be a festival of harmony will instead be a showcase of international woes, not least the rise of petro-fuelled autocracy.

Where does all that leave ordinary football fans—the middle-aged nostalgics with their reveries of Gazza, Pele or Maradona, the initiates poised to fill in their tournament wall-charts? They cannot switch the TV channel to an alternative World Cup, one less entangled in the 21st-century nexus of power and money. Much as many may wish it otherwise, it is this version or nothing; these new memories or none.

A few will tune out altogether. Others, this writer included, will be loth to give up the shoot-out agonies and extra-time miracles (missing the Qatari self-promotion in the opening ceremony will be easier). Like long-haul travel in the era of climate change, though, enjoying this tarnished World Cup may require an offset for your conscience, a donation to a human-rights group, say, or an anti-corruption charity. An event that punctuates and brightens millions of lives is set to feel grubby and shameful.

A lot can happen in four years, to a football team, a family and the world. New faces can appear in your country's midfield, or beside you on the sofa, while others recede, perhaps for ever. Pandemics can strike and wars erupt. And life can teach hard lessons, one of them being that fun is sometimes much less innocent than it had seemed.

► Zambia, stuck a piece of long grass in her ear, adjusted and wore it. The behaviour (a fashion trend, perhaps?) was soon sported by eight of the 12 members of the group.

Ms Gigliotti says it would be an error to assume that animal creativity has to match the human version, though some examples turn out to be inarguably appealing to the human eye. Take the elaborate creation of a bowerbird. Its bower—two parallel rows of slender branches that arc towards each other above a platform lined with bits of glass, shells, leaves, flowers and feathers—is a beautiful ruse by the male to at-

tract a female for mating.

Though ostensibly a book about creativity, the author frequently veers off to discuss animal emotion (crayfish have feelings too; they can exhibit signs of anxiety) and intelligence ("the pigeon should be the poster child par excellence for intelligence"). She argues that animal personality is not limited to primates, your faithful mutt or stand-offish cat. There are hundreds of thousands of studies on animals' character and they include ants, fish and mice. Anthropomorphism—the ascribing of human feelings to animals—is not the

scientific sin it once was. Ms Goodall has said she was "quite unpleasantly" disparaged for doing just that. Today, she has pointed out with a sense of vindication, you can get a PhD in animal personality.

The book makes its strongest case when advocating a revision of how to think about, and act towards, animals. Ms Gigliotti points out that humans are only one of millions of species on Earth. She suggests a retreat from anthropocentrism in favour of recognition that animals are individuals with complicated, powerful, creative lives of their own. ■



World in a dish

Good as gold

Sohan gives a flavour of Iran's contradictions

MOST OUTSIDERS have only the haziest notion of Iranian cuisine. To much of the world, the Islamic Republic is still overwhelmingly a country only of religion and revolution, of protest and political repression. By contrast, the foods of Iran's Middle Eastern neighbours have spread—not always unscathed—throughout the world. Falafel wraps are familiar fare in sandwich chains. Pots of hummus appear on the shelves of British petrol-station refrigerators; pumpkin-spice and chocolate versions menace shoppers at Trader Joe's.

Yet how many Westerners are familiar with *khoresh-e fesenjan*, a Persian stew made with a sauce of toasted walnuts and pomegranate molasses? Who would recognise *kuku sabzi*, an omelette stuffed to verdancy with dill, coriander and parsley? And while syrupy layers of baklava are commonplace outside the Middle East, the sticky squares of *gaz*, a nougat made in Isfahan, are not. Nor are the whorls of *zoolbia*, a type of fritter drenched with syrup, or the golden discs or slabs of *sohan*, a buttery, nutty brittle.

Sohan brings together two of Iran's greatest crops. First, saffron, which is thought to have originated in Iran and thrives in its dry summer climate. The dried orange threads give *sohan* its sunny hue. Along with rosewater, the spice's earthy, floral fragrance blooms through the copious quantities of butter and sugar which are the sweet's central ingredients.

Second, pistachios. A rubble of the yellow-green nuts tops each portion along with slivers of almonds. Iran was once the

world's greatest producer of pistachios. Today growers there are hobbled by the sanctions imposed on their country. They have been overtaken by American farmers, notably in California, cultivating nut trees brought from Iran almost a century ago. The first Iranian pistachio seeds were imported into America in 1930. It took years to find a variety that would thrive there. But America now dominates the global trade.

There are different forms of *sohan* across Iran, fudgier in some iterations, flavoured with honey in others. Few people take the time to cook it themselves these days. Instead it is most famously made in Qom, the country's holiest city and a centre of Shia scholarship, and sold in thin, round tins. The surface of the sweet brittle is cracked like the desert landscape in which Qom sits.

That such an indulgent sweetmeat should be most closely associated with a place of profound piety seems both incongruous and yet oddly appropriate for the Islamic Republic. It is a place of contradictions. It may currently be ruled by clerics but they run a country steeped in the mysticism of the Sufis, where for centuries the poets wrote of wine and women and love.

Restraint may be the order of the day—or at least the government—but the richness of its cuisine hints at a different way of life. Jalaluddin Rumi, a 13th-century Persian poet and one of Islam's most celebrated mystics, cautioned that "the intelligent desire self-control; children want candy." A tinful of *sohan* later and you might wonder whether he was right. ■

A history of business

Flesing out the invisible hand

For Profit. By William Magnuson. Basic Books; 368 pages; \$32 and £25

THERE IS NO mention of Elon Musk in William Magnuson's magnificent history of corporations, which stretches from the *societas publicanorum* of ancient Rome, through Renaissance Florence, the Age of Discovery and the might of American industrial capitalism to Silicon Valley. Yet reading it makes clear why the pioneer of electric cars, private rockets—and now, via Twitter, controller of part of the public sphere—commands attention. For more than 2,000 years, corporations such as his have produced some of humankind's greatest achievements. But usually the most dazzling overstep the mark, leaving a trail of debris and distrust behind them.

The contention of the book is that private enterprises often have public interest in mind. They are, as Mr Magnuson sees it, orchestrators of the invisible hand of Adam Smith's "The Wealth of Nations". Selfish individuals, looking out solely for themselves, co-operate with each other to the benefit of society as a whole.

For much of corporate history, serving society was part of their charter. Rome's *publicani*, or publicans, were government contractors who built the republic's roads, temples, aqueducts and the like, provided the empire's supply chains—and milked its subjects for taxes. One chapter illus-



brates the almost insurmountable task facing the Union Pacific Railroad Company, under charter from Congress to bind America together after the civil war. It barely knew how to make railways, let alone pay for them. The terrain was unforgiving. The masterminds were at each other's throats. When the Union Pacific, heading west, and the Central Pacific, heading east, met in Utah in 1869, setting off a frenzy of urbanisation and transcontinental commerce, poets including Walt Whitman were caught up in the national mood of celebration.

Over time, charters have gone, but corporations still bear the public good in mind—in some cases at least as much as profit. Henry Ford wanted to create low-priced cars made by highly paid workers. The Ford Motor Company was organised “to do as much good as we can, everywhere, for everybody concerned”, he once said, rather than to make ever more money. When Mark Zuckerberg launched Facebook, profit was low among his priorities, the book states. To start off with, he was far more focused on growth, in order to create network effects that made the site more enjoyable as more people used it.

Yet inevitably the public spirit degenerates into excessive greed, egomania or the abuse of power—with dangerous political consequences. The Roman *societas* ended up repressing foreign peoples and fostering military conflict. The East India Company, from 1600 to 1874, became too big to fail. Monopolists used Union Pacific to strangle commerce. Ford’s cult of efficiency morphed into creepy control over his workers—parodied in Aldous Huxley’s “Brave New World”, in which dates are measured from the “Year of Our Ford”. At Facebook engagement has come at the cost of privacy. Sometimes rogues have used the social-media platform to meddle with elections and disrupt democracy.

Mr Magnuson can stretch the point about business altruism too far. In a chapter on private equity, it is hard to believe that KKR, a buy-out pioneer, is as much, as he likes to put it, Flash Gordon (“noble, self-sacrificing”) as Gordon Gekko (“greed is good”). But within eight well-researched corporate dramas, he provides useful business lessons, too. As a law professor, he eloquently explains how issues such as principal-agent problems, competition law and environmental and labour rights have cropped up throughout history.

He draws sensible conclusions from this. Corporations cannot hope to put public interest above all else for long; what the public wants is far too complicated for them to fathom. When businesses wade into politics, they play an outsize role in shaping it. Yet the belief that the pursuit of profit will always benefit society as a whole is also sadly erroneous, the author says. ■

New British fiction

A family affair

Bournville. By Jonathan Coe. Viking; 368 pages; £20

OVER THE course of his 35-year literary career, Jonathan Coe has produced two types of standout work. The British novelist has excelled at writing incisive, corrosive political satires, such as “What a Carve Up!”, the novel of 1994 which made his name. He has also created several big-hearted, multi-stranded family sagas, including the trilogy that began with “The Rotters’ Club” in 2001. What unites these books is the author’s unique sense of humour and sharp-eyed scrutiny of the state of his nation.

Mr Coe’s latest novel is another family chronicle. Each book in his “Rotters” trilogy charted his characters’ progress over several years, but “Bournville” is a far more ambitious affair. The novel spans 75 years and follows four generations of the Lamb family; it is a rich account of important occasions, upheavals and transformations in both modern Britain and individual lives.

One of those lives dominates. Mary lives in Bournville, a model village built in Birmingham by the Cadbury family for employees of their chocolate factory. At the outset of the book, she is a young girl who witnesses a violent assault on a German man at a VE Day celebration. At the end, she is an 86-year-old woman living alone during the coronavirus lockdowns.

Between these points in time, Mary becomes a wife and a widow, a mother, grandmother and great-grandmother. Mr Coe interweaves the stories of her relatives, too. During the World Cup final in 1966, Mary’s intolerant son Jack is taught a valuable lesson by a German relative. In 1981 Mary’s husband, Geoffrey, allows his own prejudice to rear its ugly head when he sets up his son, Martin, on a date with his secretary in an attempt to end his relationship with a black woman. And in 1997, as crowds in London publicly mourn the death of Princess Diana, Mary’s youngest son, Peter, wrestles with his private passion for another man.

Mr Coe’s characters observe social change, technological developments, cultural shifts and political turmoil. Some find themselves embroiled in Britain’s “Chocolate War” with the European Union, others have their plans derailed by covid-19 restrictions. Mr Coe skilfully traces fault lines that divide the country while depicting family rifts, and he offsets TV commentaries of royal events—weddings, funerals and the queen’s “ponderous, arcane” coronation—with his characters’ thoughts and opinions.

Parts of “Bournville” feel episodic, and the cast is so large that not every character can make an impression. However, these flaws are outweighed by the book’s many delights, particularly its involving storylines, comic set pieces and astute analysis. “What kind of a country,” wonders Peter during a time of national unrest and “royalist pomp and circumstance”, “could allow these two worlds to exist side by side?”

This is a novel about people and place. Entertaining and often poignant, it presents a captivating portrait of how Britons lived then and the way they live now. ■



Turn and face the strange

Economic data

	Gross domestic product			Consumer prices			Unemployment rate		Current-account balance		Budget balance		Interest rates		Currency units	
	% change on year ago			% change on year ago			%		% of GDP, 2022†		% of GDP, 2022†		10-yr govt bonds latest, %		change on year ago, bp	
	latest	quarter*	2022†	latest	2022†				latest	2022†			latest, %	change on year ago, bp	Nov 9th	on year ago
United States	1.8	Q3	2.6	1.5	8.2	Sep	8.0	3.7	Oct	-3.7	-3.7	4.1	266	-	-	
China	3.9	Q3	16.5	3.3	2.1	Oct	2.0	5.5	Sep‡\$	2.5	-7.1	2.5	§§	-24.0	7.24	-11.6
Japan	1.6	Q2	3.5	1.8	3.0	Sep	2.2	2.6	Sep	1.9	-6.1	nil	-8.0	146	-22.8	
Britain	4.4	Q2	0.9	4.4	10.1	Sep	8.4	3.5	Jul††	-6.2	-6.9	3.7	290	0.88	-15.9	
Canada	4.6	Q2	3.3	3.1	6.9	Sep	6.8	5.2	Oct	1.3	-3.3	3.4	181	1.35	-7.4	
Euro area	2.1	Q3	0.7	3.0	10.7	Oct	8.3	6.6	Sep	1.4	-4.4	2.2	246	1.00	-14.0	
Austria	6.0	Q2	11.5	4.6	11.0	Oct	8.9	5.1	Sep	-0.5	-4.7	2.8	289	1.00	-14.0	
Belgium	4.1	Q2	2.2	2.2	12.3	Oct	9.6	5.7	Sep	-1.3	-5.1	2.8	280	1.00	-14.0	
France	1.0	Q3	0.6	2.4	6.2	Oct	5.7	7.1	Sep	-1.9	-5.4	2.9	280	1.00	-14.0	
Germany	1.1	Q3	1.1	1.4	10.4	Oct	8.4	3.0	Sep	3.9	-4.4	2.2	246	1.00	-14.0	
Greece	7.8	Q2	5.0	5.5	12.0	Sep	9.9	11.8	Sep	-6.4	-4.4	4.7	357	1.00	-14.0	
Italy	2.6	Q3	2.0	3.3	11.9	Oct	7.8	7.9	Sep	-0.8	-5.9	4.3	344	1.00	-14.0	
Netherlands	5.1	Q2	10.6	4.6	14.3	Oct	12.4	3.8	Sep	6.0	-0.9	2.5	262	1.00	-14.0	
Spain	3.8	Q3	1.0	4.4	7.3	Oct	9.2	12.7	Sep	0.2	-5.4	3.3	284	1.00	-14.0	
Czech Republic	3.6	Q2	-1.6	2.2	18.0	Sep	16.7	2.2	Sep‡	-3.8	-5.7	5.5	278	24.3	-10.3	
Denmark	3.5	Q2	3.5	2.8	10.0	Sep	7.9	2.5	Sep	9.0	0.9	2.4	248	7.42	-13.5	
Norway	3.9	Q2	2.9	2.2	6.9	Sep	6.2	3.2	Aug‡‡	17.3	11.3	1.4	76.0	10.3	-17.7	
Poland	5.3	Q2	9.3	3.5	17.9	Oct	14.4	5.1	Oct§	-3.7	-3.7	7.7	481	4.69	-15.3	
Russia	-4.1	Q2	na	-4.4	12.6	Oct	14.0	3.9	Sep§	12.9	-3.1	10.5	241	61.5	15.0	
Sweden	3.1	Q3	2.8	2.2	10.8	Sep	9.1	6.5	Sep§	3.0	-0.2	2.2	199	10.8	-21.0	
Switzerland	2.4	Q2	1.1	2.0	3.0	Oct	3.1	2.1	Oct	5.6	-1.1	1.1	128	0.98	-7.1	
Turkey	7.6	Q2	8.5	5.0	85.5	Oct	72.8	9.8	Aug§	-5.7	-3.8	12.1	-622	18.6	-47.7	
Australia	3.6	Q2	3.6	3.5	7.3	Q3	6.0	3.5	Sep	2.3	-1.7	3.9	209	1.55	-12.3	
Hong Kong	-4.5	Q3	4.1	0.4	4.3	Sep	2.0	3.9	Sep‡‡	4.1	-6.8	4.1	266	7.85	-0.8	
India	13.5	Q2	9.5	6.9	7.4	Sep	7.1	7.8	Oct	-2.3	-6.4	7.4	110	81.5	-9.1	
Indonesia	5.7	Q3	na	5.0	5.7	Oct	4.9	5.9	Q3§	1.2	-3.9	7.3	114	15,660	-9.1	
Malaysia	8.9	Q2	na	6.0	4.5	Sep	3.4	3.6	Sep§	1.6	-6.1	4.5	96.0	4.69	-11.5	
Pakistan	6.2	2022**	na	6.2	26.6	Oct	19.8	6.3	2021	-4.4	-7.6	12.9	†††	231	222	
Philippines	7.6	Q3	-0.4	7.6	7.7	Oct	5.4	5.2	Q3§	-3.8	-7.8	7.6	264	58.0	-13.6	
Singapore	4.4	Q3	6.3	3.5	7.5	Sep	6.1	2.0	Q3	18.8	-1.0	3.5	178	1.40	-3.6	
South Korea	3.0	Q3	1.1	2.6	5.7	Oct	5.2	2.4	Oct§	1.1	-3.2	4.2	188	1,365	-13.7	
Taiwan	4.1	Q3	6.6	2.9	2.7	Oct	3.0	3.6	Sep	14.1	-2.0	1.8	125	31.9	-12.9	
Thailand	2.5	Q2	2.7	2.8	6.0	Oct	6.0	1.2	Aug§	-1.2	-5.0	3.0	139	36.8	-11.0	
Argentina	6.9	Q2	4.2	5.0	83.0	Sep	73.8	6.9	Q2§	-0.6	-4.4	na	na	160	-37.5	
Brazil	3.2	Q2	5.0	2.7	7.2	Sep	9.3	8.7	Sep‡‡	-1.8	-6.2	12.2	66.0	5.16	6.4	
Chile	5.4	Q2	nil	2.2	12.8	Oct	11.7	8.0	Sep‡‡	-7.8	-0.3	6.1	2.0	904	-12.5	
Colombia	12.6	Q2	6.0	7.6	12.2	Oct	10.1	10.7	Sep§	-5.6	-4.7	13.9	618	4,907	-20.8	
Mexico	4.2	Q3	4.1	2.6	8.4	Oct	8.0	3.1	Sep	-1.0	-2.4	9.7	240	19.6	3.4	
Peru	3.3	Q2	2.3	2.6	8.3	Oct	7.7	7.7	Sep§	-3.5	-2.1	8.4	259	3.92	2.3	
Egypt	3.3	Q2	na	6.6	15.1	Sep	13.3	7.2	Q2§	-4.6	-7.4	na	na	24.4	-35.5	
Israel	4.9	Q2	6.9	5.6	4.6	Sep	4.5	3.7	Sep	2.9	0.5	3.3	213	3.55	-12.4	
Saudi Arabia	3.2	2021	na	8.9	3.1	Sep	2.5	5.8	Q2	13.5	3.5	na	na	3.76	-0.3	
South Africa	0.2	Q2	-2.9	1.9	7.8	Sep	6.9	33.9	Q2§	-1.3	-6.2	10.5	123	17.8	-15.4	

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

Markets

In local currency	% change on:			% change on:			index Nov 9th	one week	Dec 31st 2021	index Nov 9th	one week	Dec 31st 2021	% change on:		
	Index Nov 9th	one week	Dec 31st 2021	index Nov 9th	one week	Dec 31st 2021							month	year	
United States S&P 500	3,748.6	-0.3	-21.4	Pakistan KSE	42,265.4	0.8	-5.2								
United States NAScomp	10,353.2	-1.6	-33.8	Singapore STI	3,165.5	0.8	1.3								
China Shanghai Comp	3,048.2	1.5	-16.3	South Korea KOSPI	2,424.4	3.7	-18.6								
China Shenzhen Comp	2,011.5	2.2	-20.5	Taiwan TWI	13,638.8	4.1	-25.1								
Japan Nikkei 225	27,716.4	0.2	-3.7	Thailand SET	1,622.5	-0.2	-2.1								
Japan Topix	1,949.5	0.5	-2.2	Argentina MERV	143,091.5	-4.2	71.4								
Britain FTSE 100	7,296.3	2.1	-1.2	Brazil BVSP	113,580.1	-2.9	8.4								
Canada S&P TSX	19,344.3	0.3	-8.9	Mexico IPC	50,545.8	-0.6	-5.1								
Euro area EURO STOXX 50	3,728.0	2.9	-13.3	Egypt EGX 30	11,781.6	4.8	-1.1								
France CAC 40	6,430.6	2.4	-10.1	Israel TA-125	1,936.0	-0.9	-6.6								
Germany DAX*	13,666.3	3.1	-14.0	Saudi Arabia Tadawul	11,407.2	-1.1	0.7								
Italy FTSE/MIB	23,780.1	4.3	-13.0	South Africa JSE AS	69,640.3	3.8	-5.5								
Netherlands AEX	677.3	1.5	-15.1	World, dev'd MSCI	2,509.8	0.4	-22.3								
Spain IBEX 35	8,040.4	0.9	-7.7	Emerging markets MSCI	900.3	3.1	-26.9								
Poland WIG	53,294.5	3.8	-23.1												
Russia RTS, \$ terms	1,113.9	0.5	-30.2												
Switzerland SMI	10,904.3	0.9	-15.3												
Turkey BIST	4,361.0	7.1	134.8												
Australia All Ord.	7,187.4	0.1	-7.6												
Hong Kong Hang Seng	16,358.5	3.4	-30.1												
India BSE	61,033.6	0.2	4.8												
Indonesia IDX	7,070.1	0.8	7.4												
Malaysia KLSE	1,446.2	-0.4	-7.7												
US corporate bonds, spread over Treasuries															
Basis points															
Investment grade															
High-yield															

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

Commodities

The Economist commodity-price index	2015=100	Nov 1st	Nov 8th*	% change on month	% change on year
Dollar Index	All Items	139.7	143.8	-1.9	-1.4
	Food	140.6	139.3	-1.3	6.3
Industrials	All	139.0	148.1	-2.5	-7.4
	Non-food agriculturals	136.0	140.4	0.1	-2.5
	Metals	139.8	150.3	-3.2	-8.6
Sterling Index	All items	186.1	189.8	-6.0	15.5
Euro Index	All items	157.0	158.5	-5.4	13.4
Gold	\$ per oz	1,645.1	1,698.8	1.6	-6.9
Brent	\$ per barrel	94.7	95.4	1.0	12.4

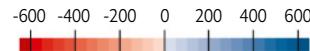
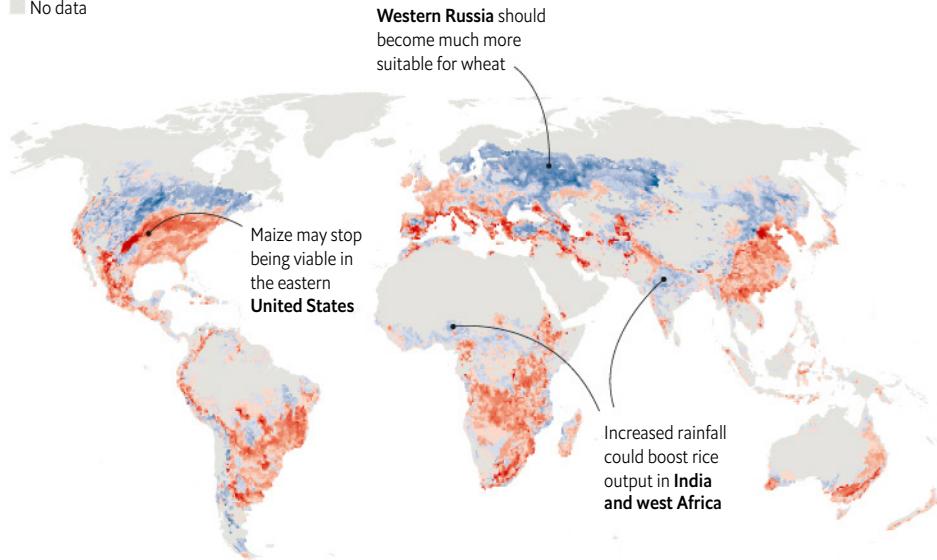
Sources: Bloomberg; CME Group; Cotlook; Refinitiv Datastream; Fastmarkets; FT; ICCO; ICO; ISO; Live Rice Index; LME; NZ Wool Services; Thompson Lloyd & Ewart; Urner Barry; WSJ. *Provisional.

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→ Climate change will push cultivation of staple crops northwards

Predicted change in maximum yield of maize, wheat and rice
From 2000 to 2041-59 average, tonnes per sq km
Based on a high-emissions scenario (RCP8.5)

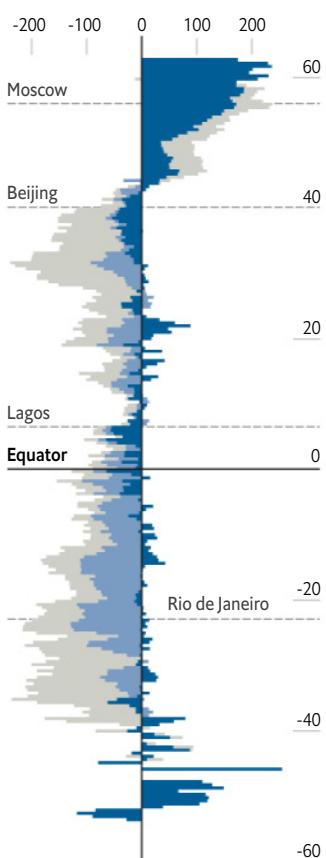
No data



Average change in tonnes per sq km

By latitude

Maize Rice Wheat



Increased overall yield

↑ Breadfruit

Adult trees can survive for months without rain

↑ Wheat

Production can expand into warming regions

↑ Potato

Longer growing seasons should increase yields

Decreased overall yield

↓ Rice

Drought will hurt output in Africa and Brazil

↓ Maize

Very vulnerable to heat when soil moisture is low

↓ Coffee

Cannot survive extreme temperatures

Sources: "Climate analogues suggest limited potential for intensification of production on current croplands under climate change", by T.A.M. Pugh et al., *Nature Communications*, 2016; *The Economist*

A time to plant

Climate change will force farmers to reshuffle what is grown where

AGRICULTURAL YIELDS have been rising for decades, defying predictions that the world's population would outgrow its food supply. Such gains stem largely from scientific advances in areas like fertilisers and genetics. This pace of discovery could slow down. Even so, farmers could still increase yields by changing a lower-tech part of their job: picking what to plant where.

A surprisingly large share of farmland is used for crops that do not maximise nutritional or economic value. One study in *Nature Geoscience* showed that by changing what is planted on existing fields, output could rise enough to feed 825m more people, while reducing water use by 10%. And global warming is likely to make the cur-

rent distribution of crops even less efficient: a paper in *Nature Food* found that climate change could cut maize yields by 6-24% by the late 21st century.

Today, crop-site mismatches tend to be most extreme in poor countries. Of the 12 crops analysed in a recent study in the *Proceedings of the Royal Society*, those most often planted in unsuitable locations were cassava, rice, sorghum and potatoes. The first three are favourites of smallholder and subsistence farmers. Because such producers need to feed their families every year, they often prioritise resistance to poor weather over maximising yield.

There is no practical way to get millions of small farmers to switch their crops. But global warming could force even agribusiness firms, which do much of the farming in richer countries, to change what they plant. Maize, America's biggest crop, is sensitive to heat, and may need genetic modification to remain viable even under moderate warming scenarios. Soyabeans, grown on nearly half of Brazil's farmland, are also expected to suffer. And coffee

struggles with extreme temperatures, which climate change will make more common. In contrast, breadfruit, which can live for months without rain, should do well at low latitudes. But bumper breadfruit harvests will do little for caffeine-starved office workers.

Warming will also generate opportunities. Parts of Russia, Canada, China and the north-western United States should become prime areas for wheat, which resists heat and drought better than maize does—though chopping down forests in these regions would accelerate climate change. A few hotter, poorer areas could benefit too: increased rainfall might improve rice production in India and west Africa.

Although such forecasts reflect the best estimates of how climate change will affect individual crops in specific regions, they are highly uncertain. Rather than preparing for a single scenario, the best defence is for farmers to learn about a wide variety of crops. The only guarantee is that global warming will transform agriculture in ways that cannot be fully foreseen. ■



The joy of voting

Shyam Saran Negi, the first voter in independent India, died on November 5th, aged 105

AS THE VIDEO began, snow was falling. It fell on the orchards, at the pine-nut forests and the huddled wooden houses of the village of Kalpa, high in the Himalayas. In one of those houses, an ancient man picked up his watch from beside his mala beads and boiled up a kettle on the stove for a glass of tea. He smiled as he sipped it. It was early morning on a very special day.

In front of the long mirror he put on his necessary layers: sweater, jerkin, heavy woollen coat. Carefully, he adjusted his woollen cap over his ears. Even in summer, in Kalpa, he had to wear much of this. The weather had shrunk and wizened him like an apple, but as he stepped out into the snow, staff in hand, his stride was firm. His destination was the polling station.

Through the narrow lanes, already drifted over, he made his way. He climbed steps slippery with ice, where he had to hang on to the wall. But as he reached the village square and saw the long queues already forming, his face lit up with happiness. People ran forward to greet him with *namaste*, place a white scarf round his neck and propel him into the voting place. When he had dropped his ballot in the box and his index fingernail was painted with indigo, he triumphantly held it up for the camera to see.

The video was made in 2014, a general election year, for India's #PledgeToVote campaign. It went viral, drawing three times as many views as one that featured a superstar actor, a glamorous model and a famous cricketer. The old man, Shyam Saran Negi, then 97 and quite forgotten, became a household name. For he was not only very old, but the first person who had ever cast a vote in independent India. And since then he had not missed a single election, whether for the Lok Sabha (the lower house of Parliament), the state legislative assembly or the district *panchayat*. People, he continually said, had a duty to exercise their franchise. The way to help India develop was to vote out the bad and vote in the best, and he would joyfully set the example.

He was not an especially educated man, and had barely left Kalpa in his life—staying there, he said, like a frog in a well, content with his work, a good marriage and nine children. It took him to the age of 20 to pass the 9th Standard exam, and the classes he taught for 23 years at Kalpa's Lower Middle School were junior basic level. But he was well-informed, constantly listening to the news, alone in his room, holding his heavy transistor radio up close to his ear. Nor was Kalpa completely out of the way of the world; it lay close to the border with Tibet, and therefore in the shadow of China. After India's humiliation in the war of 1962 the government built a proper border road, and encouraged commercial apple growing, to give the area a boost. He too could give it a boost, by promoting democracy. Back in his school after retirement he continued to instruct the children, crowding wonderingly round him in their bright-blue uniforms, on how to make their voices count. When India's Election Commission needed a brand ambassador to get the young to vote, he was the natural choice.

A series of happy accidents had made him the first voter. The first general election after the end of the British Raj was set for February–March 1952, but in Himachal, which was under snow for half the year, the poll was advanced to the end of October. It was a busy preparation time, just before the Lavi fair in Rampur when mountain folk bartered their dried fruit, cognac, apples and woollen goods for winter stocks of ghee and grains. That year the celebratory spirit also spread to voting.

Mr Negi was ready. He had no love for the British Raj and its bullying henchmen. When he was drafted in to conduct the electoral process, as he carefully put it, he went eagerly, though it meant taking the ballot boxes by mule to other villages in the mountains, Moorang, Purvani, Nesong, which took him and his team ten days. His only worry was that he needed to vote in Kalpa before he set out; so he asked for permission to do so as early as possible, at 6.30am, half an hour before the official opening time. This was his, and India's, new dawn. His thrill at his fresh-inked finger was so intense that he spent the next month, well beyond the call of duty, encouraging people round the region to do as he had done. That pride never left him for the rest of his life.

Once he was famous, every political party hoped to claim him. They had little luck. In 1951 he had voted for Jawaharlal Nehru and Congress, who won in a landslide. He maintained that Lal Bahadur Shastri, who briefly became prime minister in the mid-1960s, was his ideal leader, because he had improved food production. When Congress sank into scandals and failed to eradicate poverty he began to lean towards the BJP, but complained loudly in 2019 when his name and photo were used without permission in their local publicity. He had a good pension of 15,000 rupees a year (as a teacher, he had earned a mere 700 a month), but that did not lead him to favour the government of the day. He did not belong to any side. Too many politicians wasted the precious time of Parliament by creating a ruckus rather than having serious debates. They should serve the public interest by rooting out corruption, holding down prices and, especially, educating girls. His Himachali cap-band was neither all green, for Congress, nor all maroon, for the BJP. He wore it as he liked it and as the local fashion was.

After he reached 100 in 2017, his every appearance at the polling station was a festival. Red carpet was laid down, goatskin drums beat out a dance and trumpets sounded; he was decked with scarves, garlands and caps adorned with flowers. This was as he felt voting should be, a religious rite, with the polling station the temple and the ballot box the shrine.

Election officials gently suggested this year that, being 105 and part-blind, with his legs immobile and his knees aching, he might prefer to cast his 34th vote, for the assembly, at home. He was given a 12D form for postal voting, but sent it back; he would go to the polling station, as he had always done. In the end, he was too ill on November 2nd to make that journey. But he did not neglect his duty; the ballot box, instead, was brought to him. ■